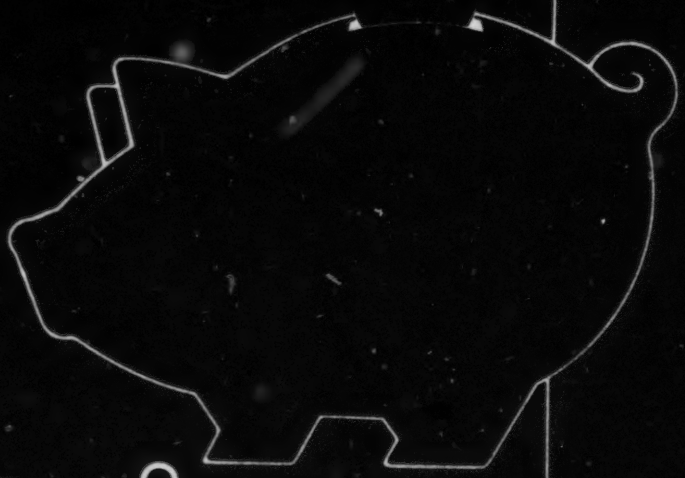

an economic evaluation of hog management in alberta

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AN ECONOMIC EVALUATION OF MANAGEMENT IN HOG PRODUCTION

BY

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&

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DR. CARLYLE ROSS

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SECTION I

INTRODUCTION

Profitability in hog production is dependent on the efficiency of production, financial management and marketing practices. Production efficiency may be determined by analysing a number of factors including weaning rates, the use of feed, labour, building and equipment, and the quality of the product marketed. This report categorizes hog enterprises by management factors using 1982 production data. The data were primarily collected for a series of economic studies of hog production published by the Production and Resource Economics Branch of Alberta Agriculture. Whereas those reports described the economics of hog production in Alberta by type of enterprise, size of operation and regional differences, this report attempts to delineate performance by level of management.

Objectives

As managerial ability is very critical to farming success, this report attempts to develop profiles of hog production in Alberta based on the level of management. The profile of the top producers can provide targets or performance standards to guide production on individual farms. The specific objectives of this report are:

1. To identify different management levels in hog production;
2. To determine the different inputs used by the different management groups and the quantities of these inputs;
3. To determine the costs/returns, profitability and relative productivity of hog production associated with the different levels of management; and
4. To provide hog producers in Alberta with some performance criteria that would help to improve their farming success.

Method of Analysis

The analysis is based on 1982 production data collected from 198 hog producers, many of whom had participated in a three-year study of the economics of hog production in Alberta. In total, there were 123 farrow-finish participants, 51 finishing participants and 24 farrow-wean participants.

Except for the farrow-wean producers, participants were randomly selected from a list of hog producers who marketed hogs through the Alberta Pork Producers Marketing Board (APPMB)[1] in 1980, 1981 and 1982. The sample was stratified by the number of hogs marketed and residence. The names of farrow-wean producers were provided by the Alberta Agriculture swine specialists.

Participants were individually interviewed by field staff to obtain detailed information regarding their hog enterprises. The questionnaire designed for the study requested such information as the value of investment and associated costs, all cash costs including hired labour and feed, homegrown feed, operator and family labour, sales/receipts, hogs produced and some general characteristics of the farm.

After the initial analysis of the farrow-finish, finishing and farrow-wean data, three management groups were established, High, Medium and Low. Six factors were used in selecting the management groups for the farrow-finish farms. These were:

1. Hog index;
2. The number of piglets weaned per sow per year;
3. Unit production cost;
4. Return to unpaid operator and family labour;
5. Return over feed cost; and
6. Return to investment dollar.

Farrow-finish farms which performed above average in all six factors were categorized as the High management group. The farms which performed

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[1] The APPMB is the provincial agency that is responsible for marketing slaughter hogs produced in Alberta.

below average in at least five of the factors were categorized as the Low management group, while the remaining operations fell into the Medium management group.

The same selection criteria were applied to the farrow-wean and finishing farms, with the exception that only five factors were taken into consideration. The finishing criteria omitted the number of piglets weaned per sow and the farrow-wean criteria excluded the hog index factor. In both cases, if a farm was above average in all of the five factors it was categorized as High management; if at least four factors were below average, the farm was characterized as Low management.

Table 1 indicates the distribution of participants by management levels. The High management group comprised over 20 per cent of the farrow-finish participants, 29 per cent of the finishing participants and 25 per cent of the farrow-wean participants.

TABLE 1

DISTRIBUTION OF STUDY PARTICIPANTS BY MANAGEMENT, ALBERTA, 1982

	Management			
Enterprise	High	Medium	Low	Total
Farrow-Finish	25	55	43	123
Finishing	15	14	22	51
Farrow-Wean	6	11	7	24
TOTAL	46	80	72	198

Outline Of Report

This report emphasizes the role of management in hog production and the results are presented by type of enterprise. It is divided into seven sections. Section II reviews some general characteristics of the management groups studied, such as age and experience of operator, type of proprietorship, and acreage farmed. A more detailed analysis of production is provided in Section III, describing the size of operation, deathloss, total production and feed used. Section IV focuses on invest ment and the labour costs associated with hog production under different management levels, while cash costs are examined in Section V. The summary of the returns and costs for the different levels of management are given in Section VI, with the gross margins and profitability of management in different types of hog enterprises. Finally, the overall summary and conclusions of this report are presented in Section VII.

There are two appendices to the report. Appendix A provides a detailed inventory of fixed assets, and their corresponding market value, as well as the associated depreciation and operating costs by type of enterprise. Appendix B contains the estimated returns and costs, the productive performance, and the amount of inputs used by the hog enterprise.

SECTION II

SOME CHARACTERISTICS OF HOG FARMS SURVEYED

Age and Farming Experience

The High management farrow-finish producers were younger (40 years) than those farrow-finish producers classed as of Medium and Low management, whose average age ranged between 42 and 43 years. However, the High management group had more farming experience (20 years), 18 years of which were directly related to hog farming compared to the reported hog experience of 15.5 and 17 years, respectively, for the Medium and Low management groups.

On finishing enterprises, the average age of the High management producers was also 40 years. These producers reported an average of almost 14 years of direct hog related experience. The age of finishing operators in the Medium and Low management groups averaged between 39 and 43 years. Producers in these two groups had, on average, 13 to 15 years of direct hog farming experience.

The average age of farrow-wean producers in the High management category was 40 years compared to the younger Medium and Low management farrow-wean producers with average ages of 37 and 36 years, respectively. Unlike the farrow-finish and finishing producers, there was no significant difference in the farming experience of the farrow-wean managers. They reported farming experience of about 18 to 19 years, and direct hog related experience of 7 years.

Ownership

Of the total farrow-finish enterprises in the top management group, 40 per cent were described as single proprietorships, 28 per cent as partnerships and 32 per cent as corporations. As the management level declined, the proportion of owner operated enterprises increased from 54 per cent in the Medium management group to 79 per cent in the Low management group. Correspondingly, as the management level decreased, there was a decline in the number of corporations reported from 27 per cent

in the Medium management group to two per cent in the Low management group.

Finishing enterprises were primarily singly owned ranging from 64 per cent of all operations in the Medium management group to 86 per cent of the operations in the Low management group. Only the High and Medium management farms reported having corporations, which comprised seven per cent of the total.

There were no corporations on the High and Medium management farrow-wean farms. About two-thirds of these farms were single proprietorships and the remaining third partnerships. Within the Low management group, 57 per cent were single proprietorships, 29 per cent partnerships, and 14 per cent corporations.

Farm Size

Total acreage farmed by farrow-finish producers ranged from 888 acres in the Low management group to 2793 acres in the High management group. The proportion of developed land varied between 63 per cent in the High management group and 78 per cent in the Low management group. Approximately 82 per cent of the land farmed by the High management group was owned, compared to 88 to 89 per cent as reported by the two other management groups.

On finishing enterprises, acreage farmed varied from 632 acres per farm in the Low management group to 962 acres per farm in the Medium group. High management farms had reportedly more developed land, 77 per cent, compared to the Medium and Low management farms with 74 to 75 per cent. As well, the High management group had a greater proportion of deeded land, 83 per cent, compared to 65 and 72 per cent in the Medium and Low management groups, respectively.

Total acreage farmed by farrow-wean operators was considerably less than the other two types of hog enterprises studied, ranging from 378 acres on Medium management farms to 528 acres on High management farms. As the management level increased, a greater proportion of land was developed, rising from 78 per cent on Low management farms to 87 per cent on High management farms. The proportion of deeded land also tended to

be lower on Low management farms, 84 per cent, than on High management farms, which were 100 per cent deeded.

As the level of management increased, farrow-finish hog receipts contributed proportionately more to total farm receipts. The proportion of hog receipts to total farm receipts rose from 64.5 per cent on Low management farrow-finish farms to 77 per cent on High management farrow-finish farms. A similar trend was evident for the farrow-wean farms where the proportion of hog receipts to total farm receipts increased from 55.2 per cent on Low management farms to 80.4 per cent on High management farms. The level of management for finishing hog enterprises bore no relationship to the contribution of hog receipts in total farm receipts. The High management finishing operations contributed 65 per cent of total farm receipts, whereas the Medium management enterprises contributed approximately 73 per cent of the total farm receipts.

SECTION III

HOG PRODUCTION AND SIZE OF ENTERPRISE

Farrow-Finish

Herd size of farrow-finish enterprises increased as the level of management increased. Farms in the High management group reported average breeding herds of 108 sows and seven boars compared to 73 sows and five boars for Medium management enterprises, and 22 sows and two boars on farms in the Low management group (Table 2). The proportion of replacement gilts in the herd ranged from 34 per cent on farms with High management to 40 per cent on farms with Medium and Low management.

The average High management farrow-finish enterprise handled about 2647 hogs, compared to 1741 and 417 hogs handled by the Medium and Low management enterprises, respectively. The total hog production was estimated at about 3348 hundredweight live or 2613.1 hundredweight dressed on High management farms and only 447.7 hundredweight live or 349.5 hundredweight dressed on Low management farms.

In 1982, hogs were marketed at an average weight of 167 pounds dressed or over 214 pounds live on High management farms, 168 pounds dressed or almost 215 pounds live on Medium management farms, and 166 pounds dressed or 212 pounds live on Low management farms. The number of hog equivalents produced per farm was 1564.5 on High management farms, 1025.6 on Medium management farms and 210.7 on Low management farms. A hog equivalent represents a hypothetical market hog with the same average hot carcass weight as the actual market hogs sold.

Post-weaning death-losses were estimated at 4.0 per cent on High management farms, 3.5 per cent on Medium management farms and 3.9 per cent on Low management farms. Although the post-weaning death-loss did not vary much with management, the average index did increase with the level of management from 100.6 on Low management farms to 102.6 on Medium management farms, and 103.7 on High management farms.

Farms under High management required approximately 5.2 pounds of feed to produce one pound of dressed pork. In contrast, enterprises with

TABLE 2

SUMMARY OF PRODUCTION FOR FARROW-FINISH ENTERPRISES BY MANAGEMENT, ALBERTA, 1982

	Management		
	High	Medium	Low
Sows	108.0	73.4	22.3
Replacement Gilts	37.2	29.4	8.9
Sows/Boar	16.2	14.1	9.7
Head Handled	2647.0	1741.0	417.0
Piglets Weaned/Sow	16.8	15.8	12.1
Weaning Age (days)	30.0	35.1	41.1
Death-loss (%)	4.0	3.5	3.9
Cwt Live Weight	3348.0	2205.7	447.7
Average Dress (%)	78.0	78.1	78.1
Cwt Dressed Weight Equivalent	2613.1	1722.4	349.5
Lb. Dressed Weight/Hog	167.0	167.9	165.9
No. Hog Equivalent	1564.5	1025.6	210.7
Average Index	103.7	102.6	100.6
Lb. Feed/Lb. Dressed	5.2	5.7	7.5
Lb. Feed/Hog Equivalent	860.0	954.5	1249.2

Medium and Low management required 5.7 and 7.5 pounds of feed, respectively, to produce one pound of dressed pork.

As the management level increased, a decrease in the proportion of home-grown feed used in rations was indicated ranging from over 74 per cent on Low management farms to almost 56 per cent on High management farms. Homegrown and purchased grain were the most common ingredient in hog rations, comprising 65 per cent of the total feed used by Medium management enterprises, and 79 and 83 per cent of the total feed used by High and Low management enterprises, respectively. Complete purchased

rations made up 10 to 11 per cent of the total feed on High and Low management farms, and 26 per cent on Medium management farms.

Finishing

High management finishing operators purchased their weaners at significantly lighter weights, 39 pounds, than the two other management groups, and finished them to about 220 pounds live or 171.7 pounds dressed per hog. On the other hand, hog producers in the Medium and Low management groups purchased their weaners at 47 to 48 pounds and finished them to market weights of 217 to 218 pounds live. However, due to a slightly higher dressing per cent, the average carcass weight was 170.9 pounds dressed in the Low management group as against 169 pounds in the Medium management group (Table 3).

Unlike the farrow-finish enterprises, High management finishing farms handled on average, two per cent fewer hogs than the Medium management group. Farms in the latter group averaged 1411 hogs per farm versus 1389 hogs per farm with High management, and 319 hogs on Low management farms. However, because of the significantly higher death-loss of 6.6 per cent on Medium management farms, these farms produced only 900 hog equivalents, one hog equivalent fewer than High management farms. The hog equivalent of the finishing enterprise is a hypothetical market hog with the same average hot carcass weight as the hogs marketed less the purchased weaner weight.

Death-loss was estimated at 2.5 per cent for the High management group and 4.1 per cent for the Low management group. The lower death-loss combined with the slightly higher market weights to push average production on High management farms to 1631.9 hundredweight live or 1273.5 hundredweight of dressed pork. Medium management production averaged 1529 hundredweight live or 1190.9 hundredweight of dressed pork per farm, while the Low management farms produced only 302.7 hundredweight live or 237.2 hundredweight of dressed pork per farm.

As with farrow-finish enterprises, the average index significantly increased with the level of management, from 100.5 in the Low management group to 103.6 in the High management group. Similarly, noticeable

TABLE 3

SUMMARY OF PRODUCTION FOR FINISHING ENTERPRISES
BY MANAGEMENT, ALBERTA, 1982

	Management		
	High	Medium	Low
Head Handled	1389.1	1410.6	318.6
Death-loss (%)	2.5	6.6	4.1
Cwt. Live Weight Produced	1631.9	1529.0	302.7
Average Dress (%)	78.0	77.9	78.4
Cwt. Dressed Weight Equivalent	1273.5	1190.9	237.2
Lb. Dressed Weight/Hog	171.7	169.0	170.9
Weaner Buy Weight	38.9	47.0	47.9
No. Hog Equivalent	901.0	899.5	177.9
Average Index	103.6	101.3	100.5
Lb. Feed/Lb. Dressed	3.5	4.5	5.4
Lb. Average Daily Gain	1.0	1.0	0.8
Average Days on Feed	176.9	172.6	219.5
Lb. Feed/Hog Equivalent	624.3	768.6	922.4

increases in feeding efficiencies were observed as the management level increased from 5.4 pounds of feed per pound of dressed pork produced by the Low management group to 4.5 pounds and 3.5 pounds of feed per pound of dressed pork produced in the Medium and High management groups, respectively.

It is recalled that the High management enterprise purchased its weaners at lighter weights than enterprises of Medium and Low management; they also fed them to a heavier market weight. Despite having to produce an extra nine pounds of dressed pork per hog, enterprises in the High management group used 23 per cent less feed per hog than the Medium management enterprise, and 35 per cent less feed than the Low management

enterprise. Average feed used per hog equivalent was 624 pounds in the High management group, and 769 and 922 pounds, respectively, in the Medium and Low management groups. The average days on feed were 177 days in the High management group, and 173 and 220 days, in the Medium and Low management groups, respectively.

Complete purchased rations played a greater role in High management operations reaching 48.4 per cent of the total feed used, versus 21 to 28 per cent for Medium and Low management farms. On the other hand, purchased and home-grown grain accounted for 64 to 70 per cent of the total feed used by Medium and Low management farms versus 45 per cent for the High management group.

Farrow-Wean

The average size of farrow-wean breeding herds varied with management from roughly 75 to 76 sows and four boars on Medium and Low management farms to 116 sows and six boars on High management farms (Table 4). The corresponding sow/boar ratio was 17 to 18 sows per boar on the Medium and Low management farms, and 20 sows per boar on the High management farms. Replacement gilts represented 23 per cent of the breeding herds on High management farms, and 32 and 17 per cent, respectively, of the breeding herd on Medium and Low management farms.

The average number of piglets weaned per sow per year significantly increased as the level of management increased from 9.2 piglets in the Low management group to 14.9 and 16.4 piglets, respectively, in the Medium and High management groups. In other words, the High management enterprises annually produced 1.5 more weaners per sow than the Medium group, and 7.2 more weaners per sow than the Low management group. Death-loss was not very different across the three management groups, ranging from 1.9 per cent in the Medium management group to 2.4 per cent in the Low management group. Because of a higher weaning rate, the High management group sold 14.1 weaners per sow which was almost double that of the Low management group, and 3.4 weaners per sow more than the Medium management group.

TABLE 4

SUMMARY OF PRODUCTION FOR FARROW-WEAN ENTERPRISES BY MANAGEMENT, ALBERTA, 1982

	Management		
	High	Medium	Low
Sows	115.8	74.6	76.1
Replacement Gilts	27.0	23.8	12.7
Sows/Boar	19.9	17.1	17.8
Head Handled	2056.2	984.0	737.9
Piglets Weaned/Sow	16.4	14.9	9.2
Weaning Age (days)	33.0	33.8	33.7
Death-loss (%)	2.2	1.9	2.4
Cwt Live Weight	870.4	465.4	358.6
Weaners Sold/Sow	14.1	10.7	7.4
Average Weaner Weight	39.7	43.1	46.3
No. Weaner Equivalent	2192.5	1079.9	774.6
Lb. Feed/Sow	4936.8	4687.9	4125.2
Lb. Feed/Weaner Eqivalent	260.8	324.0	405.5
Lb. Feed/Piglet Weaned	301.2	314.6	448.4
Lb. Feed/Lb. Live	5.7	9.7	12.4

Total production was estimated at 2193 weaner equivalents for the High management farms, and 1080 and 775 weaner equivalents for the Medium and Low management farms, respectively. A weaner equivalent represents a hypothetical weaner pig with the same average weight as the actual weaner hog sold. On average, High management producers sold weaners at lighter weights, 40 pounds, compared to 43 and 46 pounds, respectively, on Medium and Low management farms.

Top managed enterprises used 4936.8 pounds of feed per sow, which was 20 per cent more than Low management enterprises and five per cent more than the Medium management enterprises. This differential was due mainly to the number of piglets weaned per sow and the average weaner

weights. On a piglet weaned basis, the High management group used 301.2 pounds of feed, compared to 314 and 448 pounds for the Low and Medium management groups, respectively. However, if the weaner weight was normalized, the High management group would have used 303 pounds of feed to produce a 40 pound weaner versus 292 and 387 pounds, respectively, for the Medium and Low management farms.

The amount of home-grown and purchased grain used in rations did not vary much with management levels, ranging from 68 per cent on Medium management farms to 76 per cent on High management farm. Twenty-eight per cent of the feed used by the Medium management group consisted of complete purchased rations compared to 11 per cent on High management farms and 13 per cent on Low management farms.

SECTION IV

ANALYSIS OF INVESTMENT AND LABOUR COSTS

Current Market Value Of Fixed Assets

Farrow-Finish

The average investment in the farrow-finish enterprise increased with the level of management from $68,376 per farm on Low management farms to $262,313 per farm on High management farms (Table 5). Medium management farms reported an average market value of $209,825 per farm. However, investment per sow declined as the level of management increased from $3,066 on Low management farms, to $2,859 and $2,429, respectively, on Medium and High management farms.

The percentage distribution of total investment in hog production was quite similar for all three management groups. Building and building equipment accounted for 59 per cent of the total investment on Low management farms and between 64 and 66 percent on Medium and High management farms. Breeding stock, and feed storage and equipment each represented approximately nine to 11 per cent of total investment for the three management groups. Machinery and other equipment was valued at nine to 13 per cent of the total investment while manure storage and handling, and land were each allocated between two to five per cent of the total investment.

Finishing

Unlike farrow-finish enterprises, Medium management finishing farms reported the highest investment averaging $117,911 per farm (Table 5). In contrast, the Low management finishing enterprises were valued at $44,759 per farm, and High management enterprises at $64,817 per farm. When asset value was expressed over hundredweight of live pork produced, the average investment noticeably declined as the level of management increased from $148 on Low management farms, to $77 and $40, respectively

TABLE 5

CURRENT MARKET VALUE OF FIXED ASSETS ASSOCIATED WITH THE HOG ENTERPRISE BY MANAGEMENT, ALBERTA, 1982

Enterprise	Managment Group	Breeding Stock	Bldgs. & Equip	Manure Storage & Handling	Feed Storage & Equip	Machinery & Other Equip	Land	Total Farm	Total Per Sow
					Dollars				
Farrow-Finish									
	LOW	6276	40242	2614	7038	8674	3533	68376	3066
	MED.	20192	138781	4652	19241	21427	5532	209825	2859
	HIGH	27865	167170	8430	28340	24562	5946	262313	2429
Finishing									
	LOW	70	26741	1975	5885	8064	2025	44759	n.a.
	MED.	-	75546	4557	16140	14596	7071	117911	n.a.
	HIGH	-	39938	4421	5892	11910	2655	64817	n.a.
Farrow-Wean									
	LOW	16750	116329	644	1622	11800	5136	152280	2001
	MED.	19893	47892	1545	4576	11339	3568	88814	1191
	HIGH	29950	86776	1567	16654	10405	7033	152385	1316

n.a. not applicable

on Medium and High management farms. As with farrow-finish enterprises, buildings and building equipment were the major items of investment in all three management groups occupying 60 to 64 per cent of the total investment.

Farrow-Wean

The average investment in farrow-wean enterprises was quite similar for farms of Low and High management, $152,280 to $152,385 per farm, respectively. Despite this similarity, investment per sow was significantly different averaging $2,001 in the Low management group and $1,316 in the High management group. The Medium management farms reported average investment of $88,814 per farm, roughly 58 per cent of the investment reported by the other two groups. Investment per sow of $1,191 was lowest on Medium management farms (Table 5). Over three-quarters of the total value of fixed assets on Low management farms were allocated to buildings and building equipment in contrast to 54 to 57 per cent for the Medium and High management groups.

Depreciation

Depreciation was treated as a non-cash cost associated with capital ownership. It was determined using the straight line method where the difference between the current market value and the salvage value was divided by the years of remaining life. Salvage value was set at 10 per cent of the current market value. The formula was as follows:

$$\text{Depreciation} = \frac{\text{Current Market Value - Salvage Value}}{\text{Years Remaining Life}}$$

As expected there was a direct relationship between investment and depreciation for all of the enterprises studied. That is, as investment increased, so did depreciation. Depreciation represented 6.4 to 6.5 per cent of total asset value on farrow-finish farms, 6.6 to 7.8 per cent on finishing farms, and 5.0 to 5.8 per cent on farrow-wean farms.

Interest Paid on Capital Loans

Study participants were asked to report the amount of interest paid in 1982 on long term capital loans. Interest paid by farrow-finish farms ranged from an average of $3093 per farm with Low management to $5731 per farm with High management. The interest paid on capital loans represented three per cent of the total production costs for High and Medium management farrow-finish farms and seven per cent for Low management farms.

Finishing operations with Medium management reported interest payments averaging $3193 per farm which was more than double the payments of the High and Low management farms. However, when expressed as a per cent of total production cost, interest payments accounted for one, two and four per cent for the High, Medium and Low management farms, respectively.

Interest paid by farrow-wean farms was substantially higher than those of farrow-finish and finishing farms. The Low management farrow-wean farm made the highest interest payments averaging $11,169 per farm, versus $7,537 and $4,075 on High and Medium management farms, respectively. Sixteen per cent of the total production cost on Low management farrow-wean farms was attributed to long term interest payments. In the case of High and Medium management farms, interest payments accounted for nine and seven per cent, respectively.

Labour Use And Costs

Farrow-Finish

The total labour use of farrow-finish enterprises declined with the level of management from 3046.5 hours per farm characterized as High management to 2823.7 hours under Medium management, and 1293.4 hours under Low management (Table 6). The operator provided 54 per cent of the labour on High management farms, while on Medium and Low management farms the contributions were 50 and 77 per cent, respectively. Hired labour accounted for 17 per cent of the total labour used by the High and Medium management groups, and 13 per cent in the Low management group. Although

TABLE 6

LABOUR USE OF HOG ENTERPRISES BY MANAGMENT, ALBERTA, 1982

Labour	Farrow-Finish			Management Finishing			Farrow-Wean		
	High	Med	Low	High	Med	Low	High	Med	Low
	- - - - - - - - - - - - - - - - - -				Hours		- - - - - - - - - - - - - - - - - -		
Hired	519.1	490.6	168.5	0	30.4	17.3	621.0	0	441.9
Operator	1654.0	1421.7	1001.5	843.1	1092.3	671.3	970.5	1806.3	1617.6
Family	873.4	911.4	123.4	0	288.8	9.0	28.8	746.6	429.0
TOTAL	3046.5	2823.7	1293.4	843.1	1411.5	697.6	1620.3	2552.9	2488.5
Hr./Cwt. Drs. (Weaner)*	1.17	1.64	3.70	0.66	1.19	2.94	0.75	2.12*	3.00*
$/Cwt. Drs. (Weaner)*	7.75	10.76	24.17	4.53	7.50	19.93	7.24*	12.93*	17.95*

* Weaner with average live weight of 40 pounds.

more labour was used by the High management farms, the labour productivity of 1.17 hours per hundredweight of dressed pork produced was 40 percent better than the Medium group and more than three times as good as that of the Low management group.

Operator and family labour were treated as non-cash costs. The wage rates used were determined from a random survey of hired farm labour rates in Alberta. Operator rates were set at $6.85 per hour, whereas family rates varied depending on the type of work performed. Hired labour cost was the actual wage paid and treated as a cash cost.

As the level of management increased, the total cost of labour also increased from $8,450 per farm with Low management to $20,239 per farm with High management. The farms under Medium management reported labour costs of $18,533 per farm. Because of the differences in labour productivity, labour cost per hundredweight of dressed pork produced varied from $7.75 on High management farms to $24.17 on Low management farms (Table 6). In total, labour cost comprised 12 per cent of the total production cost for High management farrow-finish enterprises, 14 per cent for Medium management enterprises and 20 per cent for the Low management group.

Finishing

Unlike farrow-finish enterprises where the High management farms reported the highest labour use, it was the Medium management finishing enterprises which utilized the greatest amount of labour averaging about 1,411 hours per farm (Table 6). These farms used twice as much labour as Low management farms and 67 per cent more than the High management farms. The operator provided over three-quarters of the labour on Medium management farms and practically all of the labour for the other two management groups.

Labour productivity was highest on the High management farms averaging 0.66 hour per hundredweight of dressed pork produced, compared to average labour productivity of 1.19 and 2.94 hours, respectively, for the Medium and Low management farms. Accordingly, unit labour cost increased from $4.53 per hundredweight of dressed pork produced on the High management farms, to $19.93 per hundredweight for the Low management group.

Farrow-Wean

As with finishing enterprises, Medium management farms reported the highest labour use of 2552.9 hours per farm versus 1620.3 and 2488.5 hours, respectively, for the High and Low management farms (Table 6). Sixty per cent of the total labour reported by High management farms was provided by the operator. On Low and Medium management farms, the operator contributed 66 and 71 per cent, respectively, of the total labour used. Hired labour was quite significant on High and Low management farrow-wean enterprises, accounting for 38 and 18 per cent, respectively, of the total labour used on these farms. All of the labour on Medium management farms was contributed by the operator and his family.

Farrow-wean enterprises in the High management group required approximately three-quarters of an hour of labour to produce a 40 pound weaner, in contrast to the Medium and Low management groups with 2.12 and 3.00 hours, respectively. In other words, labour on the High management farms was almost three times as productive as the Medium management group, and four times more productive than the Low management group. The corresponding dollar costs per weaner were $7.24, $12.93 and $17.95, respectively. Labour costs amounted to 19 per cent of total production costs on High management farms, and 22 and 25 per cent, respectively, on Low and Medium management farms.

SECTION V

CASH COSTS

Farrow-Finish

Average cash cost on farrow-finish farms was inversely related to the level of management, increasing significantly from $52.88 per hundredweight of dressed pork produced on High management farms, to $60.75 and $86.23 on farms with Medium and Low management, respectively. Despite this negative relationship, cash cost accounted for 81 per cent of total production cost in the High management group, and 79 and 72 per cent in the Medium and Low management groups, respectively.

Cash cost consisted of feed and other cash expenditures. Home-grown feed was treated as a cash cost. As the level of management declined, feed cost significantly increased. The average feed cost of $35.66 per hundredweight of dressed pork produced on High management farms was 12 per cent below that of Medium management farms and 24 per cent lower than the Low management farms (Table 7). Feed cost represented two-thirds of the total cash costs and 52 to 55 per cent of total production costs on farms of High and Medium manage-ment. On Low management farms however, 55 per cent of the cash cost and 39 per cent of total production cost were attributed to feed.

Other cash costs included such 'out-of-pocket' expenses as livestock purchases, bedding, veterinary and medical expenses, chemicals and disinfectants, hired manure disposal, hired labour, hog trucking, marketing and assembly charges, taxes, insurance and utilities, accounting and professional dues, interest of 15.5 per cent on operating expenditures and the actual interest paid on capital loans. Like feed costs, other cash costs were lower on High management farms than on Low management farms. Farrow-finish farms with High management reported other cash costs of $17.22 per hundredweight of dressed pork produced, equalling 33 per cent of the total cash costs. Medium and Low management farms averaged, respectively, $20.38 and $39.04 per hundredweight of dressed pork produced and contributed 33.5 and 45.3 per cent of the total cash costs.

TABLE 7

ESTIMATED CASH COSTS FOR FARROW-FINISH ENTERPRISES
BY MANAGEMENT, ALBERTA, 1982

Management	Feed Costs	Other Cash Costs	Total Cash Costs
	- - - - - - - - - - $/Cwt Dressed - - - - - - - - - -		
High	35.66	17.22	52.88
Medium	40.37	20.38	60.75
Low	47.19	39.04	86.23

Finishing

As with farrow-finish farms, the feed cost of finishing enterprises was lower on High management farms than on Low management farms. The average feed cost of $33.22 per hundredweight of dressed pork produced on High management was 13 per cent lower than that of Medium management farms, and 27 per cent below that of Low management farms (Table 8). However, unlike farrow-finish enterprises, feed cost represented only 38 per cent of the total cash cost and 30 to 35 per cent of the total production cost across all three management groups.

Similarly, other cash costs per hundredweight of dressed pork produced steadily increased from $53.74 on High management farms to $63.17 and $76.10 on Medium and Low management farms, respectively. Roughly 62 per cent of the total cash cost on finishing farms was attributed to other cash costs. The major components of other cash costs were weaner and feeder costs. These costs represented 73 per cent of other cash costs on the High management farms. In terms of total production costs, weaner/feeder purchases contributed 41 per cent, 39 per cent and 28 per cent, respectively, on High, Medium and Low management farms.

TABLE 8

ESTIMATED CASH COSTS FOR FINISHING ENTERPRISES
BY MANAGEMENT, ALBERTA, 1982

Management	Feed Costs	Other Cash Costs	Total Cash Costs
	- - - - - - - - - - $/Cwt Dressed - - - - - - - - - -		
High	33.22	53.74	86.96
Medium	38.33	63.17	101.50
Low	45.39	76.10	121.48

Farrow-Wean

The total cash cost of farrow-wean enterprises was inversely related to the level of management, rising from $28.96 per weaner produced on High management farms to $39.24 and $62.77, respectively, on Medium and Low management farms (Table 9). Cash costs accounted for over three-quarters of the total production cost on High management farms, and 67 to 70 per cent on Medium and Low management farms.

As the level of management declined, the average feed cost per weaner produced increased from $17.43 on High management farms to $30.12 on Low management farms. Feed cost comprised 60 per cent of the total cash cost of High and Medium management farms, and only 48 per cent of the total cash cost on Low management farms.

Other cash costs per weaner produced ranged between $11.53 on High management farms and $32.65 on farms of Low management. Paid interest on capital loans contributed as much as 44 per cent of the other cash costs on Low management farms, in contrast to 24 and 30 per cent, respectively, on Medium and High management farms. Alternatively, on High, Medium and Low management farrow-wean farms, paid interest on capital loans represented nine per cent, six per cent and 16 per cent, respectively, of the total production cost.

TABLE 9

ESTIMATED CASH COSTS FOR FARROW-WEAN ENTERPRISES
BY MANAGEMENT, ALBERTA 1982

Management	Feed Costs	Other Cash Costs	Total Cash Costs
	- - - - - - - - - -	$/Weaner	- - - - - - - - - -
High	17.43	11.53	28.96
Medium	23.60	15.64	39.24
Low	30.12	32.65	62.77

SECTION VI

ESTIMATED RETURNS AND COSTS

Examination of the returns and costs associated with an enterprise helps to determine the relative profitability of that enterprise. Profit should be sufficient to provide for payment of debts, living expenses and future investment.

Total returns or gross income included all livestock sales, government support payments, other hog receipts such as hogs consumed on the farm, sale of by-products such as manure, and a dollar value adjustment for inventory change. Hogs consumed in the home, gifts and inventory were valued at the average market price received.

Farrow-Finish

The gross income on farrow-finish farms ranged from $236,739 per farm or $90.60 per hundredweight of dressed pork produced on High management farms to $31,206 per farm or $89.30 per hundredweight of dressed pork produced on Low management farms (Table 10). Farms with Medium management had returns of $154,827 per farm or $89.89 per hundredweight of dressed pork produced.

Total production cost was divided into cash and non-cash costs. Cash costs which were discussed in the previous section, significantly increased as the level of management dropped, from $52.88 per hundredweight of dressed pork produced on High management farms to $86.23 per hundredweight of dressed pork produced on Low management farms. As a percentage of total production cost, cash cost reached 81 per cent on the High management farms, and 79 and 72 per cent on Medium and Low management farms, respectively.

The non-cash cost consisted of operator and family labour and the estimated depreciation on machinery, buildings and equipment. As the level of management declined, the non-cash cost per hundredweight of dressed pork produced increased from $12.47 on High management farms to $16.16 on Medium management farms, and $34.19 on Low management farms.

TABLE 10

ESTIMATED RETURNS AND COSTS FOR FARROW-FINISH ENTERPRISES BY MANAGEMENT, ALBERTA, 1982

Returns/Costs	Management		
	High	Medium	Low
	- - - - - - - - - Dollars - - - - - - - - -		
RETURNS			
Income/Cwt Dressed			
GROSS INCOME	236739.23	89.89	89.30
COSTS			
Feed Cost/Cwt Dressed	35.66	40.37	47.19
Other Cash Cost/Cwt Dressed	17.22	20.38	39.04
Total Cash Costs/Cwt Dressed	52.88	60.75	86.23
Non-Cash Costs/Cwt Dressed	12.47	16.16	34.19
Total Costs/Cwt Dressed	65.36	76.91	120.42
TOTAL COSTS	170777.06	132463.44	42083.56
Returns Over Cash Cost/Cwt Drs.	37.72	29.14	3.07
Net Return/Cwt Dressed (or Return to Management)	25.24	12.98	-31.13
Return on Investment (%)	27.3	12.3	-11.4

Total production cost per hundredweight of dressed pork produced significantly increased as the level of management declined, from $65.36 on High management farms to $120.42 on Low management farms. Indeed, the average production cost per hundredweight of dressed pork produced on High management farms was 15 per cent lower than that of Medium management farms, and 54 per cent of the average cost of Low management farms.

Gross margin or return over cash cost is the residual available for family living expenses, depreciation and profit. It was directly related to the level of management and was positive for all three management groups. The gross margin increased from $3.07 per hundredweight of dressed pork produced on Low management farms to $37.72 on High management farms. Gross margin for the Medium management group was $29.14 per hundredweight of dressed pork produced.

Returns were insufficient to cover all production costs on Low management farms. These farrow-finish farms operated at an estimated loss of $31.13 per hundredweight of dressed pork produced compared to net returns of $12.98 and $25.24 on Medium and High management farms, respectively.

Only farms with Medium and High management realized returns on their investment in 1982. The average return on investment was estimated at 12.3 per cent and 27.3 per cent, respectively.

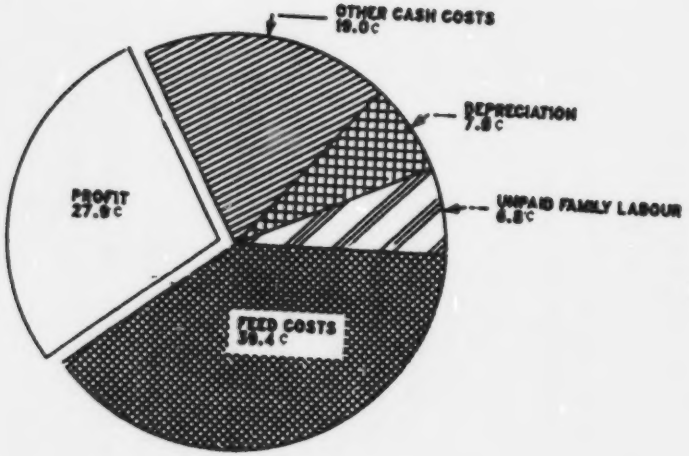
In summary, for every dollar of income generated by farrow-finish farms described as High management, 39 cents went to feed, 29 cents were used for other cash expenditures, seven cents went to family living expenses and seven cents to depreciation, leaving a profit of 18 cents (Graph 1). With the Medium management farms, given one dollar of income, 45 cents were spent on feed, 23 cents on other cash inputs, nine cents on family living and nine cents on depreciation, leaving a profit of 14 cents. Income was insufficient to cover all production costs on farms characterized as Low management.

Finishing

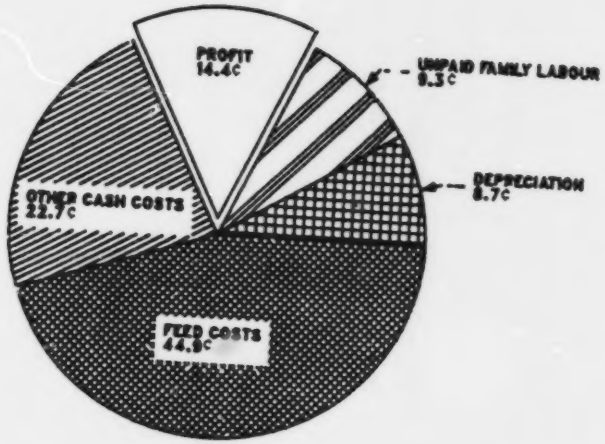
The gross income on finishing farms ranged between $26,641 per farm or $112.30 per hundredweight of dressed pork produced on Low management farms to $141,287 per farm or $110.94 per hundredweight of dressed pork produced on High management farms (Table 11). Farms with Medium management reported income of $134,373 per farm or $112.84 per hundredweight of dressed pork produced.

DISTRIBUTION OF FARROW – FINISH INCOME DOLLAR

HIGH MANAGEMENT



MEDIUM MANAGEMENT



GRAPH 1

TABLE 11

ESTIMATED RETURNS AND COSTS FOR FINISHING ENTERPRISES
BY MANAGEMENT, ALBERTA, 1982

Returns/Costs	Management		
	High	Medium	Low
	- - - - - - - - - Dollars - - - - - - - - -		
RETURNS			
Income/Cwt Dressed	110.94	112.84	112.30
GROSS INCOME	141286.69	134373.49	26640.77
COSTS			
Feed Costs/Cwt Dressed	33.22	38.33	45.39
Other Cash Costs/Cwt Dressed	53.74	63.17	76.10
Total Cash Costs/Cwt Dressed	86.95	101.50	121.48
Non-Cash Costs/Cwt Dressed	8.33	13.84	31.96
Total Costs/Cwt Dressed	95.28	115.34	153.44
TOTAL COSTS	121348.34	137354.66	36401.19
Returns Over Cash Cost/Cwt Drs.	23.99	11.34	-9.18
Net Returns/Cwt Dressed (or Return to Management)	15.66	-2.50	-41.14
Return on Investment (%)	33.1	0.2	-18.6

Cash costs per hundredweight of dressed pork produced significantly decreased as the level of management increased, from $121.48 on finishing farms with Low management to $86.95 on farms with High management. Medium management farms reported cash costs of $101.50 per hundredweight of dressed pork produced (Table 11).

Non-cash costs ranged from $8.33 per hundredweight of dressed pork produced or nine per cent of the total production cost on High management farms to $31.96 per hundredweight of dressed pork produced or 21 per cent of total production cost on Low management farms. Medium management farms reported non-cash costs of $13.84 per hundredweight of dressed pork produced or 12 per cent of total production cost.

Total production cost ranged from $36,401 per farm with Low management to $121,348 per farm with High management. As the level of management rose, the production cost per hundredweight of dressed pork produced decreased from $153.44 to $95.28. Medium management finishing farms had production costs which averaged $137,355 per farm or $115.34 per hundredweight of dressed pork produced.

The return on Low management farms were insufficient to cover all of the cash costs, leaving a deficit $9.18 per hundredweight of dressed pork produced. However, the return over cash costs or gross margin per hundredweight of dressed pork produced was $11.34 on Medium management farms and $23.99 on High management farms.

Only High management finishing farms showed a profit estimated at $15.66 per hundredweight of dressed pork produced. Losses varied from $2.50 per hundredweight of dressed pork produced on Medium management farms to $41.14 per hundredweight of dressed pork produced on Low management farms.

High management farms realized a return on investment of 33.1 per cent while Medium management farms realized 0.2 per cent. Low management farms did not show a return on their investment.

Considering those finishing farms with High management, for every dollar of income received, 30 cents were spent on feed, 49 cents on other cash costs, four cents on operator and family labour, and three cents on depreciation, leaving 14 cents as profit. In the case of Medium management farms, for every dollar of income received, 34 cents were spent on feed, 56 cents on other cash inputs, and six cents on depreciation, leav-

ing only four cents to cover the operator and family labour and profit (Graph 2). If the Medium management operation was to break-even, the operator and his family would have had to accept a wage rate averaging $4.19 per hour.

Farrow-Wean

Gross income on farrow-wean farms increased almost 300 per cent from $36,788 per farm on Low management farms to $104,379 per farm on High management farms (Table 12). Farms with Medium management reported income of $58,839 per farm or $54.48 per weaner equivalent. Gross income was $47.61 per weaner equivalent on High management farms and $47.50 per weaner equivalent on Low management farms.

Cash costs per weaner equivalent ranged upwards from $28.96 on High management farms to $62.77 on Low management farms. Medium management farms reported cash costs amounting to $39.24 per weaner equivalent. The major components of cash costs were feed and other cash expenses.

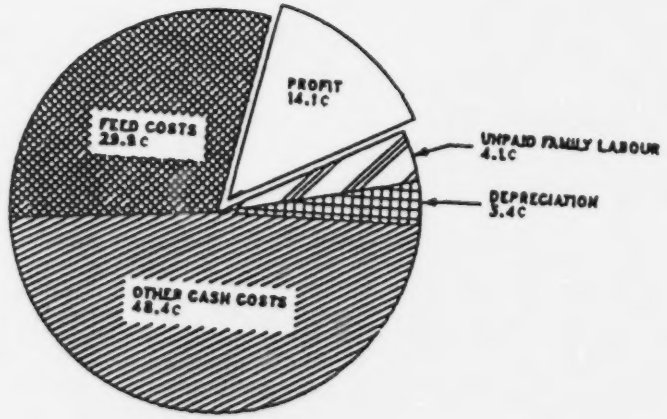
Non-cash costs varied greatly among management levels, increasing from $8.69 per weaner equivalent on High management farms to $26.50 on Low management farms. Farms with medium management reported non-cash costs amounting to $19.18 per weaner equivalent. The high non-cash cost on Low management farms was attributed mainly to the low labour productivity and throughput.

Only the Medium and High management farrow-wean farms showed a positive gross margin or return over cash costs estimated, respectively, at $15.24 and $18.65 per weaner equivalent. The Low management farms required an additional $15.27 per weaner equivalent to cover their cash expenses. High management farms were likewise the only farms to show a profit of $9.96 per weaner equivalent and a return on investment of 19.3 per cent. The average cost of producing a weaner on High management farms was equal to 64 per cent of that of Medium management farms, and 42 per cent of that of Low management farms.

Given one dollar of income, farrow-wean enterprises with High management spent about 37 cents on feed, 24 cents on other cash inputs, 11 cents on operator and family labour, and seven cents on depreciation,

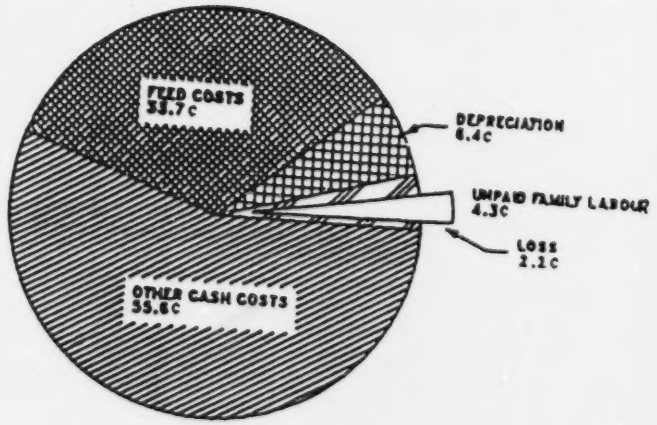
DISTRIBUTION OF FINISHING INCOME DOLLAR

HIGH MANAGEMENT



* INCLUDES: WEANER PURCHASES

MEDIUM MANAGEMENT



* REDUCTION IN UNPAID FAMILY LABOUR

GRAPH 2

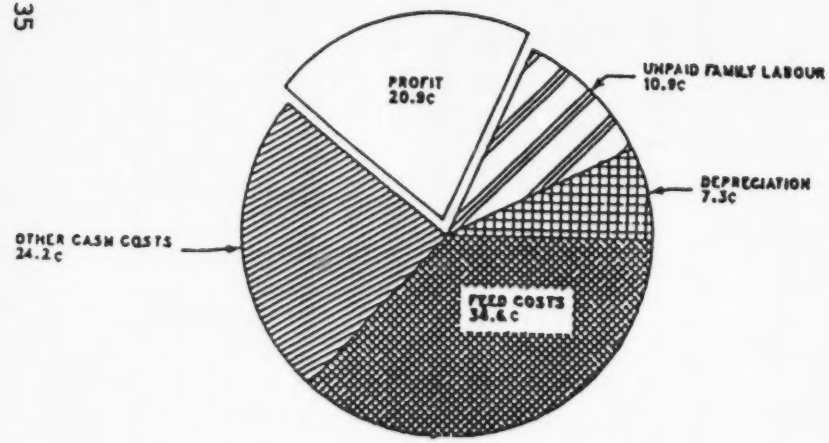
TABLE 12

ESTIMATED RETURNS AND COSTS FOR FARROW-WEAN ENTERPRISES
BY MANAGEMENT, ALBERTA, 1982

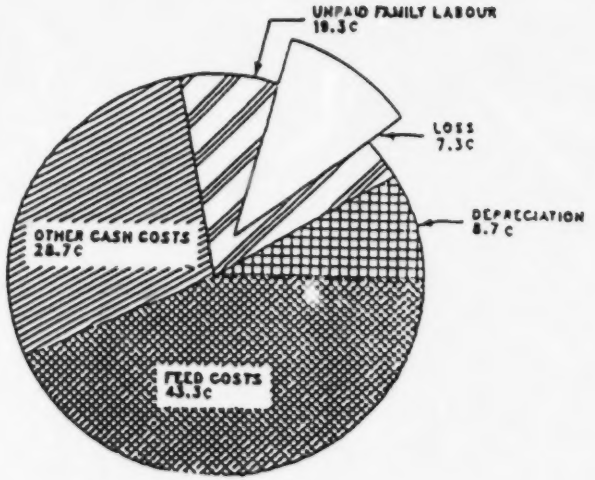
Returns/Costs	Management		
	High	Medium	Low
	- - - - - - Dollars - - - - - -		
RETURNS			
Income/Weaner Eqivalent	47.61	54.48	47.50
GROSS INCOME	104378.98	58838.97	36788.36
COSTS			
Feed Costs/Weaner Eqivalent	17.43	23.60	30.12
Other Cash Costs/Weaner Equivalent	11.53	15.64	32.65
Total Cash Costs/Weaner Equivalent	28.96	39.24	62.77
Non-Cash Costs/Weaner Equivalent	8.69	19.18	26.50
Total Costs/Weaner Equivalent	37.65	58.42	89.27
TOTAL COSTS	82546.00	63088.85	69142.61
Returns Over Cash Costs/Wnr Eq.	18.65	-15.24	-15.27
Net Return/Weaner Equivalent (or Return to management)	9.96	-3.94	-41.77
Return on Investment (%)	19.3	-0.2	-13.9

DISTRIBUTION OF FARROW – WEAN INCOME DOLLAR

HIGH MANAGEMENT



MEDIUM MANAGEMENT



GRAPH 3

leaving 21 cents as profit (Graph 3). For Medium management farms, returns were sufficient to cover cash expenses but not the total production cost. However, in the case of Low management farms, the returns were not even sufficient to cover feed costs and other cash expenses.

SECTION VII

SUMMARY AND CONCLUSION

The main objectives of this study were to identify different levels of management in hog production in Alberta and to provide producers with targets or performance standards against which they could compare their hog operations. By comparing their performance against the top managers, individual hog producers could make changes in their management practices that would enhance the profitability of the hog enterprise.

In this study, three levels of management were identified based on six criteria, viz., hog index, piglets weaned per sow, unit production cost, return to operator and family labour, return over feed cost and return to investment. All six management factors were applied to farrow-finish farms while five factors were used for finishing and farrow-wean farms[1]. Those farms which performed most efficiently in all of the factors considered were categorized as High management. Conversely, those farms which performed above average in only one factor or none at all, were called Low management. The Medium management group fell between the two extremes.

There were 123 farrow-finish records, 51 finishing, and 24 farrow-wean. The High management group comprised about 20 per cent of the total farrow-finish participants, 29 per cent of the total finishing participants and 25 per cent of the total farrow-wean participants.

Examination of the economics of hog production under the three levels of management revealed that the farrow-finish and finishing hog operations studied, producers in the High management group had more hog related farming experience than the Medium and Low management producers. The High management farrow-finish producers reported 18 years of hog experience, while finishing High management producers averaged 14 years. There was no difference in the years of hog farming experience, seven years, among the three classes of farrow-wean managers.

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[1] Finishing: piglets weaned per sow was omitted. Farrow-wean: hog index was omitted.

Producers in the High management group generally farmed substantially more land than producers in the other two management groups. However, in the case of finishing farms, it was the Medium management producers who had the largest land base. Hog production was significantly more important on High management farrow-finish and farrow-wean farms contributing 77 to 80 per cent of total farm receipts. Finishing hog receipts were more important in the Medium management group where they accounted for 73 per cent of total farm receipts compared to 65 per cent for the High management group.

Farrow-finish farms with High management had the highest level of investment in hog production, $262,313 per farm, compared to the other management groups. Both High management and Low management farrow-wean farms reported an investment of about $152,000 per farm. This was not the case for finishing farms where the Medium management group had the highest investment averaging $117,911 per farm.

Despite the very high investment on High management farms, the investment per sow for farrow-finish and farrow-wean farms was significantly lower than on Low management farms. Similarly, investment per hundredweight of pork produced by finishing farms was significantly lower on High management farms than on Low management farms. The lone exception was the Medium management farrow-wean farms which invested substantially less than the High and Low management farrow-wean producers and also had the lowest investment per sow of $1,191.

High management farrow-finish producers reported on average 108 sows per farm compared to 73 and 22 sows for the Medium and Low management groups, respectively. As with farrow-finish enterprise, the High management farrow-wean producers had the largest herd of 116 sows per farm, versus 75 to 76 sows for the two other management groups.

Whereas death-loss was somewhat similar for all three levels of farrow-finish and farrow-wean management groups, it was significantly lower for the High management finishing farms compared with the Low management farms. The number of piglets weaned per sow declined significantly with the level of management. High management farrow-finish and farrow-wean farms weaned 16.8 and 16.4 piglets per sow, respectively, versus 12.1 and 9.2 piglets in the corresponding Low management groups.

Market hogs from High management farrow-finish and finishing farms were indexed at 103.6 to 103.7 in contrast to the index of 100.5 to 100.6 for the Low management groups. The provincial average for 1982 was 102.2.

Complete purchased rations were more common on finishing and farrow-wean farms than on farrow-finish farms. Moreover, with the exception of finishing farms, it was the Medium management group which made the greatest use of such rations. Over one-quarter of the feed used by the Medium management farrow-finish group was derived from complete purchased rations compared to 10 to 11 per cent for the High and Low management groups. Similarly, one-third of the feed used by the Medium management farrow-wean group and 25 to 27 per cent of that of the High and Low management group consisted of complete purchased rations. In contrast, almost one-half of the feed used by the High management finishing group consisted of complete purchased rations versus 21 to 28 per cent for the Medium and Low management finishing groups.

More efficient use of feed was reported by the High management group. The High management farrow-finish and finishing groups required 5.2 and 3.5 pounds of feed, respectively, to produce one pound of dressed pork, versus 7.5 and 5.4 pounds for the corresponding Low management groups. Assuming that pigs were weaned at 40 pounds, High management farrow-wean enterprises would use on average 303 pounds of feed as against 292 and 387 pounds of feed for the Medium and Low management farms, respectively.

In accordance with more efficient feed use, the feed cost on farrow-finish and finishing farms declined as the level of management improved, giving about a $12 per hundredweight cost advantage to the High management group over the Low management group. The High management farrow-wean producers also enjoyed a feed cost advantage relative to the other managers. For the 40 pound weaner, the cost advantage over the Medium management group was $4.34 per weaner, and $8.46 for the Low management group.

High management farms also made more efficient use of labour than other managers. High management farrow-finish producers as a group utilized 1.17 hours of labour to produce one hundredweight of dressed pork, whereas the Medium and Low management groups required 1.64 and 3.70

hours, respectively. The High management finishing group required 0.66 hour of labour to produce one hundredweight of dressed pork, whereas the Medium and Low management groups required 1.19 and 2.94 hours, respectively. In the case of farrow-wean production, the High management group needed only three-quarters of an hour of labour to produce a 40 pound weaner versus 2.12 hours and 3.00 hours for the Medium and Low management farms, respectively. Accordingly, per unit labour cost significantly increased on farrow-finish, finishing and farrow-wean farms as the level of management declined.

Gross margin or the return over cash costs substantially increased with the level of management. All three management levels of farrow-finish producers had positive gross margins which varied from $3.07 per hundredweight of dressed pork produced on Low management farms to $37.72 per hundredweight on High management farms. The gross margin for finishing farms increased from a negative $9.18 for the Low management group to $23.99 for the High management group. Only the High management farrow-wean group of producers showed a positive gross margin which was $18.65 per weaner.

Profitability increased with the level of management for the three enterprises studied. Profits of $25.24 per hundredweight of dressed pork produced by the High management farrow-finish group was almost double that of the Medium group. In contrast, returns were insufficient to cover all costs for the Low management farrow-finish farms. Considering finishing farms, only the High management group showed a profit of $15.66 per hundredweight of dressed pork produced compared to losses amounting to $41.14 on Low management farms. Similarly, only the High management farrow-wean group had a profit of $9.96 per weaner produced.

Return on investment also improved with management. High and Medium management farrow-finish farms realized returns on investment averaging 27.3 per cent and 12.3 per cent, respectively. High and Medium management finishing farms also realized returns on their hog investment of 33.1 and 0.2 per cent, respectively. Only the High management farrow-wean enterprises realized a return on investment averaging 19.3 per cent.

In conclusion, the study clearly shows that during 1982 hog production in Alberta was profitable for producers with High management, regardless of the type of enterprise. Medium management paid in the case of farrow-finish, but only broke even in finishing and farrow-wean production. In 1982, the greatest return on investment for the High management category was exhibited in the finishing enterprise. Finishing production also required substantially less investment in fixed assets than the other two enterprises. Farrow-finish hog production offered the best chance of farming success as both Medium and High management producers realized positive returns on their investment in 1982. This is consistent with previous research results which have shown that over the three year period, 1980-1982, farrow-finish operations were profitable.

Although High management finishing and farrow-wean operations were profitable in 1982, it is not clear whether this profitability would hold in the long run. Other research results have shown that during the period 1981 to 1983, farrow-wean production was generally unprofitable, while finishing operations barely broke even in 1981. More long term research could shed light on this question.

APPENDIX A

HIGH MANAGEMENT

CURRENT (1982) MARKET VALUE OF CAPITAL ASSETS BY MANAGEMENT, ALBERTA

TYPE OF ENTERPRISE: FARROW-FINISH

	CURRENT VALUE	ENTERPRISE VALUE	REMAIN. LIFE	*/* USE TO ENTERPRISE	COSTS PER YEAR OPER.	DEPR.
LIVESTOCK:						
108 SOWS $239/HEAD	25818.	25818.		100		
7 BOARS $292/HEAD	2047.	2047.		100		
---GILTS $---/HEAD						
****SUB-TOTAL	27865.	27865.			0.00	0.00
BUILDINGS:						
FARROWING BARN	73121.	73121.	13	100	624.24	5142.18
WEANING BARN	10551.	10551.	18	100	122.22	538.54
DRY SOW BARN	26357.	26357.	18	100	111.70	1317.05
GROWER-FINISHER BARN	44632.	44632.	13	100	817.10	3177.18
OFFICE BUILDING	1002.	954.	20	95	42.00	43.18
ELECTRICAL FOR COMPLETE UNIT	13.	13.	8	100	2.06	1.49
OTHER	985.	985.	20	100	0.59	43.43
****SUB-TOTAL	156661.	156613.			1719.91	10263.04
OTHER BUILDINGS:						
BARNS	2341.	2341.	9	100	19.41	241.93
SHEDS	3504.	3446.	12	98	9.69	260.97
FEED TROUGHS	125.	125.	5	100		20.48
SELF-FEEDERS	12.	12.	15	100		0.71
FENCING	1091.	1091.	11	100	29.71	88.62
OTHER	10.	10.	8	100		1.21
OTHER						
****SUB-TOTAL	7083.	7024.			58.81	613.91
MANURE STORAGE, HANDLING SYSTEM:						
LAGOON	1141.	1141.		100		
STORAGE PIT						
FARROWING BARN	218.	212.	12	97	0.57	15.29
GROWER-FINISHING BARN	64.	64.	20	100		2.86
LIQUID MANURE SPREADER	5518.	5043.	8	91	300.52	548.34
MANURE SPREADER	1497.	1497.	7	100	16.21	191.18
SUBMERSIBLE PUMP OR AGITATOR	474.	474.	8	100	0.74	53.26
OTHER						
****SUB-TOTAL	8910.	8430.			318.03	810.94
FEED STORAGE:						
---- STEEL BINS	7096.	6487.	24	91	149.22	248.38
---- WOODEN BINS	491.	481.	9	98	8.69	49.65
---- FEED BINS ---- TONNES	2367.	2358.	18	100	5.91	115.15
HIGH MOISTURE GRAIN						
OTHER	1510.	1458.	17	97	6.25	79.16
****SUB-TOTAL	11464.	10784.			170.06	492.34
FEEDING EQUIPMENT:						
ELECTRIC HAMMER MILL	17381.	14653.	16	84	206.38	835.98
FEED CONVEYORS	294.	294.	3	100	29.41	77.53
GRINDER	76.	76.	11	100	7.35	6.32
MOBILE GRINDER/MIXER	1390.	1048.	3	75	47.35	324.85
FEED CART	113.	113.	13	100	1.76	7.84
OTHER	1372.	1372.	18	100	176.47	67.59
****SUB-TOTAL	20626.	17556.			468.73	1320.11
EQUIPMENT IN BARNS:						
---- CRATES	2017.	2017.	12	100	26.47	154.17
---- PENS ---- FT.	148.	148.	9	100		14.08
---- WATERERS	76.	76.	11	100	1.76	6.07
---- SELF-FEEDERS	418.	418.	11	100	1.03	34.58
---- INDIVIDUAL STALLS	430.	430.	16	100		24.89
---- HEAT LAMPS	7.	7.	1	100	3.82	6.62
---- VENTILATION	421.	421.	16	100	5.44	24.06
---- OTHER	17.	17.	5	100		3.12
****SUB-TOTAL	3533.	3533.			38.53	267.60
EXTRA EQUIPMENT:						
WELL AND WATER LINES	7883.	4725.	19	60	52.55	229.23
SCALE ---- LB. CAPACITY	151.	151.	10	100		13.23
TRUCKS 1) 1/2 OR 3/4 TON	4492.	1650.	4	37	666.70	383.65
2) ONE OR TWO TON	1253.	351.	3	28	130.00	113.75
3) 3 TON	17034.	6841.	7	40	1405.99	874.03
TRACTORS 1) UP TO 75 H.P.	3125.	1541.	6	49	440.91	237.35
2) 76 TO 110 H.P.	9298.	2749.	7	30	906.64	361.72
3) OVER 110 H.P.	7778.	2144.	5	28	578.82	419.43
STANDBY GENERATOR	3300.	2438.	13	74	47.27	163.10
PRESSURE WASHER	501.	469.	4	94	14.60	95.45
TOOLS AND VET., EQUIPMENT	455.	319.	5	70	12.60	54.44
GRAIN AUGER	1588.	711.	7	45	7.20	87.60
OTHER	548.	474.	12	86	9.16	35.59
****SUB-TOTAL	57405.	24562.			4272.42	3068.57
LAND - BLDGS. SITE & PASTURE	5960.	5946.		100		
TOTAL INVESTMENT	299508.	262313.			7046.49	16836.50

MEDIUM MANAGEMENT

CURRENT (1982) MARKET VALUE OF CAPITAL ASSETS BY MANAGEMENT, ALBERTA

TYPE OF ENTERPRISE: FARROW-FINISH

	CURRENT VALUE	ENTERPRISE VALUE	REMAIN. LIFE	*/* USE TO ENTERPRISE	COSTS PER YEAR OPER.	DEPR.
LIVESTOCK:						
73 SOWS $255/HEAD	18629.	18629.		100		
5 BOARS $313/HEAD	1564.	1564.		100		
---GILTS $---/HEAD						
****SUB-TOTAL	20192.	20192.			0.00	0.00
BUILDINGS:						
FARROWING BARN	78530.	78314.	16	100	1231.18	4344.75
WEANING BARN	6445.	6445.	13	100	164.36	441.58
DRY SOW BARN	8783.	8783.	17	100	150.71	469.50
GROWER-FINISHER BARN	24972.	24972.	13	100	424.94	1698.74
OFFICE BUILDING	119.	119.	20	100		5.36
ELECTRICAL FOR COMPLETE UNIT	4.	4.	20	100		0.20
OTHER	5617.	5617.	27	100	238.10	186.68
****SUB-TOTAL	124469.	124253.			2209.29	7146.81
OTHER BUILDINGS:						
BARNS	7560.	7500.	9	99	107.72	730.19
SHEDS	663.	588.	8	89	21.43	63.97
FEED TROUGHS	77.	77.	4	100	0.60	18.03
SELF-FEEDERS	179.	179.	9	100	4.52	18.81
FENCING	1052.	1046.	8	99	31.05	110.79
OTHER	314.	314.	15	100		18.57
OTHER						
****SUB-TOTAL	9843.	9702.			165.31	960.36
MANURE STORAGE, HANDLING SYSTEM:						
LAGOON	164.	164.		100		
STORAGE PIT	24.	24.	19	100		1.13
FARROWING BARN	74.	74.	20	100		3.35
GROWER-FINISHING BARN						
LIQUID MANURE SPREADER	2830.	2271.	6	80	308.00	351.45
MANURE SPREADER	1721.	1017.	7	59	35.33	133.19
SUBMERSIBLE PUMP OR AGITATOR	546.	506.	6	93	25.35	77.23
OTHER	595.	595.	20	100		26.79
****SUB-TOTAL	5955.	4652.			368.69	593.12
FEED STORAGE:						
---- STEEL BINS	5289.	4735.	17	90	10.72	256.23
---- WOODEN BINS	624.	504.	6	81	23.33	71.03
---- FEED BINS ---- TONNES	4098.	4098.	10	100	31.19	358.91
HIGH MOISTURE GRAIN						
OTHER	267.	217.	17	81		11.80
****SUB-TOTAL	10277.	9554.			65.24	697.96
FEEDING EQUIPMENT:						
ELECTRIC HAMMER MILL	5384.	5366.	16	100	101.93	293.36
FEED CONVEYORS	688.	688.	14	100	5.95	43.78
GRINDER						
MOBILE GRINDER/MIXER	3085.	2965.	4	96	129.61	608.86
FEED CART	7.	7.	9	100		0.66
OTHER	662.	662.	14	100		41.71
****SUB-TOTAL	9825.	9687.			237.49	988.37
EQUIPMENT IN BARNS:						
---- CRATES	3920.	3920.	10	100	32.12	354.26
---- PENS ---- FT.	20.	20.	3	100	3.57	5.09
---- WATERERS	90.	90.	5	100	6.07	14.74
---- SELF-FEEDERS	170.	170.	5	100	10.95	30.37
---- INDIVIDUAL STALLS	29.	29.	4	100		6.43
---- HEAT LAMPS	30.	30.	5	100	7.98	5.10
---- VENTILATION	321.	321.	6	100	12.62	47.91
---- OTHER	246.	246.	9	100	2.62	24.35
****SUB-TOTAL	4826.	4826.			75.93	488.24
EXTRA EQUIPMENT:						
WELL AND WATER LINES	4910.	2825.	19	58	119.62	136.30
SCALE ---- LB. CAPACITY	163.	124.	10	76	0.45	11.30
TRUCKS 1) 1/2 OR 3/4 TON	4084.	2036.	4	50	818.78	479.73
2) ONE OR TWO TON	3705.	2900.	6	78	669.81	409.51
3) 3 TON	5690.	2163.	6	38	447.53	306.29
TRACTORS 1) UP TO 75 H.P.	2310.	1069.	5	46	435.28	207.39
2) 76 TO 110 H.P.	5805.	1837.	6	32	784.42	262.62
3) OVER 110 H.P.	12618.	4538.	11	36	1378.03	377.95
STANDBY GENERATOR	3896.	2266.	11	58	26.31	186.48
PRESSURE WASHER	541.	492.	5	91	41.60	89.73
TOOLS AND VET., EQUIPMENT	400.	367.	7	92	12.77	45.69
GRAIN AUGER	837.	474.	5	57	34.54	81.11
OTHER	427.	337.	9	79	6.38	34.55
****SUB-TOTAL	45387.	21427.			4775.54	2648.65
LAND - BLDGS. SITE « PASTURE	5618.	5532.		98		
TOTAL INVESTMENT	236393.	209825.			7897.49	13523.52

LOW MANAGEMENT

CURRENT (1982) MARKET VALUE OF CAPITAL ASSETS BY MANAGEMENT, ALBERTA

TYPE OF ENTERPRISE: FARROW-FINISH

	CURRENT VALUE	ENTERPRISE VALUE	REMAIN. LIFE	*/* USE TO ENTERPRISE	COSTS PER YEAR OPER.	DEPR.
LIVESTOCK:						
22 SOWS $258./HEAD	5682.	5682.		100		
2 BOARS $297./HEAD	594.	594.		100		
---GILTS $---/HEAD						
****SUB-TOTAL	6276.	6276.			0.00	0.00
BUILDINGS:						
FARROWING BARN	20747.	20229.	16	98	482.00	1131.56
WEANING BARN	3012.	3012.	13	100	69.73	204.93
DRY SOW BARN	3346.	3346.	20	100	285.11	152.22
GROWER-FINISHER BARN	11741.	11626.	18	99	159.90	593.17
OFFICE BUILDING	106.	106.	18	100		5.43
ELECTRICAL FOR COMPLETE UNIT	51.	51.	18	100	3.77	2.55
OTHER	33.	33.	15	100	3.77	1.91
****SUB-TOTAL	39037.	38404.			1004.29	2091.77
OTHER BUILDINGS:						
BARNS	560.	526.	12	94	9.39	39.29
SHEDS	473.	447.	8	94	15.58	52.21
FEED TROUGHS	49.	49.	4	100	5.74	10.01
SELF-FEEDERS						
FENCING	362.	231.	6	64	24.17	34.10
OTHER	16.	16.	6	100		2.33
OTHER						
****SUB-TOTAL	1461.	1269.			54.89	137.93
MANURE STORAGE, HANDLING SYSTEM:						
LAGOON	479.	479.		100		
STORAGE PIT						
FARROWING BARN	401.	401.	20	100		18.04
GROWER-FINISHING BARN						
LIQUID MANURE SPREADER	1070.	1070.	8	100	42.62	126.60
MANURE SPREADER	474.	315.	9	66	9.39	31.91
SUBMERSIBLE PUMP OR AGITATOR	134.	134.	12	100	17.02	9.94
OTHER	215.	215.	12	100		15.78
****SUB-TOTAL	2773.	2614.			69.03	202.26
FEED STORAGE:						
---- STEEL BINS	3450.	2367.	14	69	6.13	156.63
---- WOODEN BINS	851.	586.	8	69	17.08	65.74
---- FEED BINS ---- TONNES	491.	467.	13	95	1.01	33.47
HIGH MOISTURE GRAIN	34.	34.	20	100		1.52
OTHER						
****SUB-TOTAL	4826.	3454.			24.22	257.36
FEEDING EQUIPMENT:						
ELECTRIC HAMMER MILL	2443.	2441.	14	100	52.94	152.49
FEED CONVEYORS	71.	71.	10	100		6.38
GRINDER	64.	57.	2	88	11.25	28.15
MOBILE GRINDER/MIXER	1736.	1015.	5	58	49.27	188.64
FEED CART						
OTHER						
****SUB-TOTAL	4314.	3584.			113.47	375.67
EQUIPMENT IN BARNS:						
---- CRATES	229.	229.	10	100	3.19	20.18
---- PENS ---- FT.	40.	40.	13	100	2.13	2.84
---- WATERERS	56.	48.	5	86	2.75	9.63
---- SELF-FEEDERS	105.	105.	20	100	3.19	4.81
---- INDIVIDUAL STALLS						
---- HEAT LAMPS	32.	32.	4	100	3.51	7.32
---- VENTILATION	84.	84.	4	100	7.45	17.02
---- OTHER	30.	30.	7	100	0.21	4.06
****SUB-TOTAL	577.	569.			22.43	65.86
EXTRA EQUIPMENT:						
WELL AND WATER LINES	4000.	2098.	18	52	37.34	103.47
SCALE ---- LB. CAPACITY	20.	20.	5	100	0.11	3.84
TRUCKS 1) 1/2 OR 3/4 TON	2925.	904.	3	31	487.29	310.53
2) ONE OR TWO TON	1430.	746.	9	52	275.98	76.84
3) 3 TON	2776.	737.	6	27	231.42	106.75
TRACTORS 1) UP TO 75 H.P.	4036.	851.	4	21	372.54	182.80
2) 76 TO 110 H.P.	7428.	1692.	5	23	544.27	310.30
3) OVER 110 H.P.	4500.	477.	3	11	168.78	123.12
STANDBY GENERATOR	665.	503.	17	76	1.61	27.03
PRESSURE WASHER	192.	152.	6	79	5.92	21.53
TOOLS AND VET., EQUIPMENT	118.	71.	4	61	2.26	16.64
GRAIN AUGER	541.	250.	7	46	10.40	31.81
OTHER	210.	171.	5	82	31.28	28.25
****SUB-TOTAL	28842.	8674.			2169.19	1342.91
LAND - BLDGS. SITE « PASTURE	3543.	3533.		100		
TOTAL INVESTMENT	91648.	68376.			3457.51	4473.76

HIGH MANAGEMENT

CURRENT (1982) MARKET VALUE OF CAPITAL ASSETS BY MANAGEMENT, ALBERTA
TYPE OF ENTERPRISE: FINISHING

	CURRENT VALUE	ENTERPRISE VALUE	REMAIN. LIFE	*/* USE TO ENTERPRISE	COSTS PER YEAR OPER.	DEPR.
LIVESTOCK:						
---SOWS $---/HEAD						
---BOARS $---/HEAD						
---GILTS $---/HEAD						
****SUB-TOTAL	0.	0.			0.00	0.00
BUILDINGS:						
FARROWING BARN						
WEANING BARN	4410.	4410.	13	100	46.67	303.83
DRY SOW BARN						
GROWER-FINISHER BARN	32951.	32951.	15	100	943.33	2014.83
OFFICE BUILDING	367.	367.	8	100		41.25
ELECTRICAL FOR COMPLETE UNIT						
OTHER						
****SUB-TOTAL	37728.	37728.			990.00	2359.92
OTHER BUILDINGS:						
BARNS	2000.	2000.	14	100	2.67	129.82
SHEDS	7.	7.	2	100		3.00
FEED TROUGHS						
SELF-FEEDERS						
FENCING						
OTHER						
OTHER						
****SUB-TOTAL	2007.	2007.			2.67	132.82
MANURE STORAGE, HANDLING SYSTEM:						
LAGOON						
STORAGE PIT						
FARROWING BARN						
GROWER-FINISHING BARN						
LIQUID MANURE SPREADER	3373.	3105.	6	92	84.08	435.32
MANURE SPREADER	607.	583.	5	96	38.42	99.14
SUBMERSIBLE PUMP OR AGITATOR	733.	733.	10	100		66.00
OTHER						
****SUB-TOTAL	4713.	4421.			122.49	600.46
FEED STORAGE:						
---- STEEL BINS	2341.	2131.	15	91		127.45
---- WOODEN BINS	173.	173.	15	100		10.48
---- FEED BINS ---- TONNES	1568.	1568.	18	100	37.00	79.85
HIGH MOISTURE GRAIN						
OTHER						
****SUB-TOTAL	4082.	3872.			37.00	217.79
FEEDING EQUIPMENT:						
ELECTRIC HAMMER MILL	1000.	1000.	4	100	13.33	225.00
FEED CONVEYORS						
GRINDER						
MOBILE GRINDER/MIXER	1003.	1003.	6	100	30.00	140.40
FEED CART	17.	17.	9	100		1.67
OTHER						
****SUB-TOTAL	2020.	2020.			43.33	367.07
EQUIPMENT IN BARNS:						
---- CRATES						
---- PENS ---- FT.						
---- WATERERS	15.	15.	4	100	3.33	3.30
---- SELF-FEEDERS	22.	22.	1	100	3.33	18.25
---- INDIVIDUAL STALLS						
---- HEAT LAMPS						
---- VENTILATION						
---- OTHER	167.	167.	13	100	0.67	11.54
****SUB-TOTAL	203.	203.			7.33	33.09
EXTRA EQUIPMENT:						
WELL AND WATER LINES	2333.	1773.	24	76	113.49	65.23
SCALE ---- LB. CAPACITY	93.	93.	18	100		4.74
TRUCKS 1) 1/2 OR 3/4 TON	2603.	906.	5	35	315.77	177.37
2) ONE OR TWO TON	1520.	1101.	7	72	265.77	144.46
3) 3 TON	3733.	2083.	11	56	297.40	172.89
TRACTORS 1) UP TO 75 H.P.	2767.	938.	8	34	195.25	106.46
2) 76 TO 110 H.P.	7600.	2181.	6	29	460.69	334.47
3) OVER 110 H.P.	8000.	1107.	5	14	257.92	183.52
STANDBY GENERATOR	811.	583.	17	72		31.15
PRESSURE WASHER	60.	59.	4	98	5.21	14.10
TOOLS AND VET., EQUIPMENT	70.	53.	2	76	10.67	20.82
GRAIN AUGER	620.	385.	8	62	5.38	40.84
OTHER	1047.	648.	9	62	10.19	65.99
****SUB-TOTAL	31257.	11910.			1937.75	1362.04
LAND - BLDGS. SITE & PASTURE	2713.	2655.		98		
TOTAL INVESTMENT	84724.	64817.			3140.58	5073.19

MEDIUM MANAGEMENT

CURRENT (1982) MARKET VALUE OF CAPITAL ASSETS BY MANAGEMENT, ALBERTA
TYPE OF ENTERPRISE: FINISHING

	CURRENT VALUE	ENTERPRISE VALUE	REMAIN. LIFE	*/* USE TO ENTERPRISE	COSTS PER YEAR OPER.	DEPR.
LIVESTOCK:						
---SOWS $---/HEAD						
---BOARS $---/HEAD						
---GILTS $---/HEAD						
****SUB-TOTAL	0.	0.			0.00	0.00
BUILDINGS:						
FARROWING BARN	4286.	4286.	14	100	71.43	275.51
WEANING BARN	1071.	1071.	20	100		48.21
DRY SOW BARN						
GROWER-FINISHER BARN	61051.	61051.	18	100	1028.21	3028.02
OFFICE BUILDING						
ELECTRICAL FOR COMPLETE UNIT	36.	36.	9	100		3.57
OTHER	6487.	4038.	15	62	44.46	237.13
****SUB-TOTAL	72931.	70482.			1144.11	3592.45
OTHER BUILDINGS:						
BARNS	2500.	2500.	10	100		225.00
SHEDS						
FEED TROUGHS	36.	36.	9	100		3.57
SELF-FEEDERS						
FENCING	11.	11.	3	100		3.21
OTHER						
OTHER						
****SUB-TOTAL	2546.	2546.			0.00	231.79
MANURE STORAGE, HANDLING SYSTEM:						
LAGOON						
STORAGE PIT						
FARROWING BARN						
GROWER-FINISHING BARN	946.	946.	24	100		35.76
LIQUID MANURE SPREADER	3994.	3515.	7	88	67.77	443.59
MANURE SPREADER	343.	79.	7	23	0.41	10.56
SUBMERSIBLE PUMP OR AGITATOR	16.	16.	9	100		1.64
OTHER						
****SUB-TOTAL	5299.	4557.			68.19	491.55
FEED STORAGE:						
---- STEEL BINS	2521.	2456.	24	97	13.92	91.55
---- WOODEN BINS	1025.	825.	18	80	14.37	42.31
---- FEED BINS ---- TONNES	285.	285.	12	100		22.15
HIGH MOISTURE GRAIN						
OTHER	929.	929.	25	100		33.43
****SUB-TOTAL	4760.	4495.			28.29	189.43
FEEDING EQUIPMENT:						
ELECTRIC HAMMER MILL	3818.	3818.	13	100	61.79	270.00
FEED CONVEYORS	429.	429.	14	100	7.14	27.55
GRINDER						
MOBILE GRINDER/MIXER	1689.	966.	4	57	15.93	194.02
FEED CART	4.	4.	4	100		0.80
OTHER	12857.	6429.	25	50		231.43
****SUB-TOTAL	18796.	11645.			84.86	723.81
EQUIPMENT IN BARNS:						
---- CRATES						
---- PENS ---- FT.	214.	214.	20	100		9.64
---- WATERERS	163.	163.	5	100		29.30
---- SELF-FEEDERS	652.	652.	11	100	7.14	53.95
---- INDIVIDUAL STALLS	67.	67.	8	100		7.56
---- HEAT LAMPS						
---- VENTILATION	64.	64.	6	100		10.34
---- OTHER	1357.	1357.	9	100	31.43	132.86
****SUB-TOTAL	2518.	2518.			38.57	243.65
EXTRA EQUIPMENT:						
WELL AND WATER LINES	3566.	2208.	19	62	23.44	105.18
SCALE ---- LB. CAPACITY	188.	181.	4	96		46.33
TRUCKS 1) 1/2 OR 3/4 TON	2158.	732.	2	34	519.03	287.33
2) ONE OR TWO TON	1464.	321.	6	22	80.95	45.64
3) 3 TON	6634.	4069.	4	61	1008.71	819.79
TRACTORS 1) UP TO 75 H.P.	6393.	2839.	7	44	501.01	387.86
2) 76 TO 110 H.P.	8108.	2203.	6	27	711.22	340.51
3) OVER 110 H.P.	2500.	125.	7	5	76.30	16.47
STANDBY GENERATOR	2143.	1088.	13	51	3.62	72.80
PRESSURE WASHER	155.	102.	3	66	6.11	26.29
TOOLS AND VET., EQUIPMENT	474.	225.	6	48	10.57	36.04
GRAIN AUGER	870.	503.	7	58	15.71	65.53
OTHER						
****SUB-TOTAL	34652.	14596.			2956.69	2249.77
LAND - BLDGS. SITE & PASTURE	7607.	7071.		93		
TOTAL INVESTMENT	149110.	117911.			4320.70	7722.46

LOW MANAGEMENT

CURRENT (1982) MARKET VALUE OF CAPITAL ASSETS BY MANAGEMENT, ALBERTA

TYPE OF ENTERPRISE: FINISHING

	CURRENT VALUE	ENTERPRISE VALUE	REMAIN. LIFE	*/* USE TO ENTERPRISE	COSTS PER YEAR OPER.	DEPR.
LIVESTOCK:						
---SOWS $---/HEAD	57.	57.		100		
---BOARS $---/HEAD	14.	14.		100		
---GILTS $---/HEAD						
****SUB-TOTAL	70.	70.			0.00	0.00
BUILDINGS:						
FARROWING BARN	791.	498.	13	63	14.30	33.20
WEANING BARN	591.	591.	10	100	13.64	52.81
DRY SOW BARN						
GROWER-FINISHER BARN	24513.	24435.	21	100	202.85	1064.65
OFFICE BUILDING						
ELECTRICAL FOR COMPLETE UNIT	8.	8.	30	100		0.24
OTHER	409.	409.	5	100		73.64
****SUB-TOTAL	26312.	25940.			230.79	1224.53
OTHER BUILDINGS:						
BARNS	282.	282.	15	100	4.55	17.18
SHEDS	97.	97.	6	100	1.82	13.47
FEED TROUGHS	4.	4.	4	100		0.96
SELF-FEEDERS						
FENCING	301.	301.	9	100	20.23	29.06
OTHER	1.	1.	3	100		0.34
OTHER						
****SUB-TOTAL	685.	685.			26.59	61.02
MANURE STORAGE, HANDLING SYSTEM:						
LAGOON	103.	103.		100		
STORAGE PIT						
FARROWING BARN						
GROWER-FINISHING BARN						
LIQUID MANURE SPREADER	304.	304.	4	100	18.18	70.97
MANURE SPREADER	1126.	965.	17	86		52.60
SUBMERSIBLE PUMP OR AGITATOR	421.	421.	7	100	22.73	52.75
OTHER	182.	182.	10	100		16.36
****SUB-TOTAL	2135.	1975.			40.91	192.68
FEED STORAGE:						
---- STEEL BINS	2466.	1821.	24	74		67.07
---- WOODEN BINS	234.	183.	8	78	12.23	19.38
---- FEED BINS ---- TONNES	355.	349.	19	98	6.94	16.80
HIGH MOISTURE GRAIN						
OTHER	65.	65.	18	100	0.91	3.25
****SUB-TOTAL	3120.	2418.			20.07	106.51
FEEDING EQUIPMENT:						
ELECTRIC HAMMER MILL	2449.	2393.	21	98	66.63	103.32
FEED CONVEYORS						
GRINDER						
MOBILE GRINDER/MIXER	1401.	1073.	6	77	20.47	173.78
FEED CART						
OTHER						
****SUB-TOTAL	3851.	3467.			87.10	277.09
EQUIPMENT IN BARNS:						
---- CRATES	9.	9.	5	100		1.64
---- PENS ---- FT.						
---- WATERERS	7.	7.	2	100		3.27
---- SELF-FEEDERS	65.	65.	9	100		6.41
---- INDIVIDUAL STALLS						
---- HEAT LAMPS	2.	2.	3	100		0.68
---- VENTILATION	32.	32.	10	100		2.86
---- OTHER						
****SUB-TOTAL	116.	116.			0.00	14.86
EXTRA EQUIPMENT:						
WELL AND WATER LINES	2413.	1862.	21	77	58.48	80.65
SCALE ---- LB. CAPACITY	18.	18.	7	100		2.31
TRUCKS 1) 1/2 OR 3/4 TON	2736.	500.	3	18	272.18	141.43
2) ONE OR TWO TON	873.	614.	8	70	183.13	73.64
3) 3 TON	666.	207.	7	31	51.02	26.14
TRACTORS 1) UP TO 75 H.P.	3102.	897.	7	29	242.43	115.69
2) 76 TO 110 H.P.	6569.	1289.	6	20	395.21	207.16
3) OVER 110 H.P.	7773.	1834.	5	24	367.86	326.54
STANDBY GENERATOR	245.	230.	24	94		8.51
PRESSURE WASHER	69.	37.	2	54	4.19	17.35
TOOLS AND VET., EQUIPMENT	304.	211.	6	69	7.70	32.83
GRAIN AUGER	525.	215.	6	41	3.73	31.65
OTHER	254.	151.	11	60	6.78	12.41
****SUB-TOTAL	25549.	8064.			1592.71	1076.30
LAND - BLDGS. SITE & PASTURE	2025.	2025.		100		
TOTAL INVESTMENT	63863.	44759.			1998.17	2952.99

HIGH MANAGEMENT

CURRENT (1982) MARKET VALUE OF CAPITAL ASSETS BY MANAGEMENT, ALBERTA

TYPE OF ENTERPRISE: FARROW-WEAN

	CURRENT VALUE	ENTERPRISE VALUE	REMAIN. LIFE	•/• USE TO ENTERPRISE	COSTS PER YEAR OPER.	DEPR.
LIVESTOCK:						
116 SOWS $243 /HEAD	28200.	28200.		100		
6 BOARS $292 /HEAD	1750.	1750.		100		
---GILTS $---/HEAD						
****SUB-TOTAL	29950.	29950.			0.00	0.00
BUILDINGS:						
FARROWING BARN	57180.	57180.	16	100	846.67	3159.22
WEANING BARN	7127.	7127.	10	100	280.00	639.10
DRY SOW BARN	6250.	6250.	16	100	33.33	356.25
GROWER-FINISHER BARN	7576.	7576.	20	100		340.91
OFFICE BUILDING						
ELECTRICAL FOR COMPLETE UNIT						
OTHER						
****SUB-TOTAL	78133.	78133.			1160.00	4495.47
OTHER BUILDINGS:						
BARNS	34.	34.	1	100		30.90
SHEDS	6129.	6129.	15	100	84.17	376.02
FEED TROUGHS						
SELF-FEEDERS						
FENCING	1153.	1153.	8	100	55.00	127.51
OTHER						
OTHER						
****SUB-TOTAL	7316.	7316.			139.17	534.43
MANURE STORAGE, HANDLING SYSTEM:						
LAGOON						
STORAGE PIT						
FARROWING BARN						
GROWER-FINISHING BARN						
LIQUID MANURE SPREADER	917.	917.	6	100	5.83	139.29
MANURE SPREADER						
SUBMERSIBLE PUMP OR AGITATOR	650.	650.	10	100		58.50
OTHER						
****SUB-TOTAL	1567.	1567.			5.83	197.79
FEED STORAGE:						
---- STEEL BINS	5212.	5212.	23	100		208.26
---- WOODEN BINS	472.	472.	10	100	20.00	44.52
---- FEED BINS ---- TONNES	3292.	3292.	22	100	6.67	135.80
HIGH MOISTURE GRAIN						
OTHER	117.	117.	20	100		5.25
****SUB-TOTAL	9092.	9092.			26.67	393.83
FEEDING EQUIPMENT:						
ELECTRIC HAMMER MILL	5712.	5712.	18	100	100.00	283.27
FEED CONVEYORS						
GRINDER						
MOBILE GRINDER/MIXER	1900.	1850.	5	97	61.17	353.25
FEED CART						
OTHER						
****SUB-TOTAL	7612.	7562.			161.17	636.52
EQUIPMENT IN BARNS:						
---- CRATES	1227.	1227.	9	100	10.00	122.73
---- PENS ---- FT.						
---- WATERERS	100.	100.	20	100		4.50
---- SELF-FEEDERS						
---- INDIVIDUAL STALLS						
---- HEAT LAMPS						
---- VENTILATION						
---- OTHER						
****SUB-TOTAL	1327.	1327.			10.00	127.23
EXTRA EQUIPMENT:						
WELL AND WATER LINES	4042.	2641.	22	65	39.58	107.91
SCALE ---- LB. CAPACITY	33.	33.	15	100		2.00
TRUCKS 1) 1/2 OR 3/4 TON	2917.	1202.	3	41	604.38	355.50
2) ONE OR TWO TON	500.	500.	5	100	280.42	90.00
3) 3 TON	4750.	1705.	7	36	272.06	224.50
TRACTORS 1) UP TO 75 H.P.	3583.	1500.	9	42	159.10	155.83
2) 76 TO 110 H.P.	2667.	1458.	9	55	368.47	138.75
3) OVER 110 H.P.	7833.	392.	10	5	80.55	35.25
STANDBY GENERATOR	42.	42.	5	100	5.83	7.50
PRESSURE WASHER	247.	247.	4	100	10.00	63.00
TOOLS AND VET., EQUIPMENT	308.	258.	5	84	29.17	44.67
GRAIN AUGER	307.	144.	6	47	0.33	23.28
OTHER	333.	283.	8	85	90.00	33.30
****SUB-TOTAL	27561.	10405.			1939.89	1281.49
LAND - BLDGS. SITE « PASTURE	7033.	7033.		100		
TOTAL INVESTMENT	169592.	152385.			3442.72	7666.76

CURRENT (1982) MARKET VALUE OF CAPITAL ASSETS BY MANAGEMENT, ALBERTA
TYPE OF ENTERPRISE: FARROW-MEAN

	CURRENT VALUE	ENTERPRISE VALUE	REMAIN. LIFE	*/* USE TO ENTERPRISE	COSTS PER YEAR OPER.	DEPR.
LIVESTOCK:						
75 SOWS $248 /HEAD	18636.	18636.		100		
4 BOARS $314 /HEAD	1257.	1257.		100		
---GILTS $---/HEAD						
****SUB-TOTAL	19893.	19893.			0.00	0.00
BUILDINGS:						
FARROWING BARN	38794.	38610.	16	100	524.00	2234.75
WEANING BARN	439.	439.	5	100	13.64	79.09
DRY SOW BARN	2169.	2169.	14	100	4.55	140.67
GROWER-FINISHER BARN	426.	426.	15	100	1.82	25.57
OFFICE BUILDING						
ELECTRICAL FOR COMPLETE UNIT						
OTHER	947.	947.	11	100	9.09	76.22
****SUB-TOTAL	42776.	42592.			553.09	2553.29
OTHER BUILDINGS:						
BARNS	1000.	1000.	10	100	13.64	90.00
SHEDS	600.	600.	3	100	31.82	184.36
FEED TROUGHS	5.	5.	2	100		2.05
SELF-FEEDERS						
FENCING	1187.	1187.	9	100	29.55	122.51
OTHER	9.	9.	5	100		1.64
OTHER						
****SUB-TOTAL	2800.	2800.			75.00	400.56
MANURE STORAGE, HANDLING SYSTEM:						
LAGOON						
STORAGE PIT						
FARROWING BARN						
GROWER-FINISHING BARN						
LIQUID MANURE SPREADER	1091.	1091.	7	100	13.64	135.00
MANURE SPREADER	273.	245.	10	90		22.00
SUBMERSIBLE PUMP OR AGITATOR						
OTHER	209.	209.	10	100		18.82
****SUB-TOTAL	1573.	1545.			13.64	175.82
FEED STORAGE:						
---- STEEL BINS	455.	455.	20	100		20.45
---- WOODEN BINS	1318.	1318.	11	100	20.00	108.00
---- FEED BINS ---- TONNES	900.	900.	9	100	9.09	92.05
HIGH MOISTURE GRAIN						
OTHER	209.	209.	15	100		12.55
****SUB-TOTAL	2882.	2882.			29.09	233.05
FEEDING EQUIPMENT:						
ELECTRIC HAMMER MILL	739.	739.	3	100	131.82	203.97
FEED CONVEYORS						
GRINDER						
MOBILE GRINDER/MIXER	1045.	909.	4	87	62.73	190.67
FEED CART	45.	45.	20	100		2.05
OTHER						
****SUB-TOTAL	1830.	1694.			194.55	396.68
EQUIPMENT IN BARNS:						
---- CRATES	1956.	1956.	13	100		134.96
---- PENS ---- FT.	182.	182.	5	100		32.73
---- WATERERS	64.	64.	9	100		6.55
---- SELF-FEEDERS						
---- INDIVIDUAL STALLS						
---- HEAT LAMPS	25.	25.	2	100	1.82	10.04
---- VENTILATION	209.	209.	7	100	32.73	25.36
---- OTHER	64.	64.	5	100	9.09	10.64
****SUB-TOTAL	2500.	2500.			43.64	220.27
EXTRA EQUIPMENT:						
WELL AND WATER LINES	5010.	4306.	20	86	25.45	193.98
SCALE ---- LB. CAPACITY	79.	79.	10	100		7.07
TRUCKS 1) 1/2 OR 3/4 TON	1955.	1071.	4	55	877.68	236.43
2) ONE OR TWO TON	1373.	620.	4	45	312.98	124.57
3) 3 TON	955.	439.	8	46	226.70	49.19
TRACTORS 1) UP TO 75 H.P.	1091.	298.	5	27	223.85	57.11
2) 76 TO 110 H.P.	5284.	1834.	8	35	938.50	211.09
3) OVER 110 H.P.	3500.	1570.	12	45	1250.03	122.80
STANDBY GENERATOR						
PRESSURE WASHER	141.	128.	7	91	15.91	16.65
TOOLS AND VET., EQUIPMENT	910.	505.	6	56	30.11	71.05
GRAIN AUGER	577.	307.	10	53	7.16	28.33
OTHER	182.	182.	10	100	4.55	16.36
****SUB-TOTAL	21055.	11339.			3912.93	1134.64
LAND - BLDGS. SITE & PASTURE	3568.	3568.		100		
TOTAL INVESTMENT	98877.	88814.			4821.93	5117.30

LOW M[illegible]MENT

CURRENT (1982) MARKET VALUE OF CAPITAL ASSETS BY MANAGEMENT, ALBERTA

TYPE OF ENTERPRISE: FARROW-MEAN

	CURRENT VALUE	ENTERPRISE VALUE	REMAIN. LIFE	*/* USE TO ENTERPRISE	COSTS PER YEAR OPER.	DEPR.
LIVESTOCK:						
75 SOWS $204 /HEAD	15500.	15500.		100		
4 BOARS $313 /HEAD	1250.	1250.		100		
---GILTS $---/HEAD						
****SUB-TOTAL	16750.	16750.			0.00	0.00
BUILDINGS:						
FARROWING BARN	62151.	62151.	24	100	258.06	2314.81
WEANING BARN	779.	779.	20	100		35.07
DRY SOW BARN	4500.	4500.	24	100	7.14	172.29
GROWER-FINISHER BARN	12000.	12000.	20	100	28.57	540.00
OFFICE BUILDING						
ELECTRICAL FOR COMPLETE UNIT						
OTHER	5714.	5714.	25	100		205.71
****SUB-TOTAL	85144.	85144.			293.77	3267.88
OTHER BUILDINGS:						
BARNS	19713.	19581.	15	99		1163.26
SHEDS	992.	992.	6	100	35.71	149.85
FEED TROUGHS						
SELF-FEEDERS						
FENCING	448.	448.	8	100	14.29	50.07
OTHER	1571.	1571.	20	100	36.80	70.71
OTHER						
****SUB-TOTAL	22724.	22592.			86.80	1433.89
MANURE STORAGE, HANDLING SYSTEM:						
LAGOON						
STORAGE PIT						
FARROWING BARN						
GROWER-FINISHING BARN						
LIQUID MANURE SPREADER						
MANURE SPREADER	1753.	596.	5	34	0.21	111.63
SUBMERSIBLE PUMP OR AGITATOR						
OTHER	48.	48.	2	100	57.14	21.41
****SUB-TOTAL	1801.	644.			57.36	133.04
FEED STORAGE:						
---- STEEL BINS	343.	343.	20	100		15.43
---- WOODEN BINS	271.	271.	5	100		51.64
---- FEED BINS ---- TONNES	14.	14.	10	100		1.29
HIGH MOISTURE GRAIN						
OTHER						
****SUB-TOTAL	629.	629.			0.00	68.36
FEEDING EQUIPMENT:						
ELECTRIC HAMMER MILL	21.	21.	5	100		3.86
FEED CONVEYORS						
GRINDER						
MOBILE GRINDER/MIXER	1329.	971.	3	73	3.57	272.36
FEED CART						
OTHER						
****SUB-TOTAL	1350.	993.			3.57	276.21
EQUIPMENT IN BARNS:						
---- CRATES	8000.	8000.	15	100	42.86	480.00
---- PENS ---- FT.						
---- WATERERS	71.	71.	20	100	21.43	3.21
---- SELF-FEEDERS						
---- INDIVIDUAL STALLS	325.	325.	10	100	42.86	29.22
---- HEAT LAMPS	54.	54.	10	100	25.71	4.82
---- VENTILATION						
---- OTHER	143.	143.	10	100	28.57	12.86
****SUB-TOTAL	8593.	8593.			161.43	530.12
EXTRA EQUIPMENT:						
WELL AND WATER LINES	3179.	2073.	22	65	41.26	84.28
SCALE ---- LB. CAPACITY	5.	5.	5	100		0.90
TRUCKS 1) 1/2 OR 3/4 TON	2842.	1198.	3	42	786.97	377.72
2) ONE OR TWO TON	1612.	1471.	4	91	627.19	304.20
3) 3 TON	643.	64.	5	10	24.94	11.57
TRACTORS 1) UP TO 75 H.P.	2143.	1314.	4	61	309.98	285.43
2) 76 TO 110 H.P.	1857.	554.	1	30	495.94	429.43
3) OVER 110 H.P.	5714.	2857.	10	50	197.14	257.14
STANDBY GENERATOR						
PRESSURE WASHER	563.	549.	2	97	13.57	290.04
TOOLS AND VET., EQUIPMENT	280.	244.	3	87	7.86	77.01
GRAIN AUGER	1306.	1019.	9	78	14.71	103.44
OTHER	500.	450.	10	90	6.43	40.50
****SUB-TOTAL	20645.	11800.			2525.99	2261.67
LAND - BLDGS. SITE & PASTURE	5404.	5136.		95		
TOTAL INVESTMENT	163039.	152280.			3128.92	7971.16

APPENDIX B

HIGH MANAGEMENT

ESTIMATED RETURNS AND COSTS OF HOG PRODUCTION IN ALBERTA

TYPE OF ENTERPRISE: FARROW-FINISH

				TOTAL	PER HOG	PER CWT DRESSED EQUIV.
RETURNS:						
1474 - MARKET HOGS	2462.6 CWT DRS.	$ 84.86	/CWT	208984.78	131.90	79.98
30 SOWS	99.2 CWT DRS.	$ 66.05	/CWT	6553.64	4.14	2.51
3 BOARS	9.9 CWT DRS	$ 66.62	/CWT	662.72	0.42	0.25
97 - WEANERS	96.9 HEAD	$ 49.75	/HEAD	4821.56	3.04	1.85
9 - FEEDERS	8.6 HEAD	$ 54.02	/HEAD	462.40	0.29	0.18
5 - BREEDING STOCK	4.6 HEAD	$169.59	/HEAD	773.32	0.49	0.30
GOVERNMENT SUPPORT PAYMENTS				5378.64	3.39	2.06
INV. CHANGE (SOW,GIL,FDRS,WNR)				8087.86	5.10	3.10
OTHER RECEIPTS				1014.31	0.64	0.39
A. GROSS INCOME				236739.23	149.42	90.60
FEED COSTS:						
BARLEY	411.2 TONNES	$101.24	/TONNE	41630.36	26.27	15.93
OTHER GRAINS	61.2 TONNES	$142.81	/TONNE	8745.56	5.52	3.35
21 % DRY SOW RATION	5.5 TONNES	$184.93	/TONNE	1019.69	0.64	0.39
35 % NURSING SOW RATION	1.5 TONNES	$370.86	/TONNE	567.72	0.36	0.22
22 % PRE-STARTER RATION	0.5 TONNES	$461.32	/TONNE	241.46	0.15	0.09
18 % STARTER RATION	36.9 TONNES	$320.62	/TONNE	11835.19	7.47	4.53
16 % GROWER RATION	19.6 TONNES	$228.91	/TONNE	4486.79	2.83	1.72
% FINISHER RATION	TONNES	$	/TONNE			
40 % PROTEIN SUPPLEMENT	17.0 TONNES	$374.83	/TONNE	6388.16	4.03	2.44
% PROTEIN SUPPLEMENT	TONNES	$	/TONNE			
% CANOLA MEAL	TONNES	$	/TONNE			
46 % SOYABEAN MEAL	32.1 TONNES	$333.32	/TONNE	10701.77	6.75	4.10
VIT.+MINERALS+SALT+LIMESTONE	11.1 TONNES	$	/TONNE	6220.89	3 93	2.38
FEED PROCESSING	TONNES	$	/TONNE			
FEED TRUCKING COSTS	TONNES	$143.16	/TONNE	143.16	0.09	0.05
OTHER FEED ITEMS	3.6 TONNES	$	/TONNE	1208.67	0.76	0.46
TOTAL FEED COSTS				93189.42	58.82	35.66
OTHER CASH COSTS:						
WEANERS	12.2 HEAD	$ 42.42	/HEAD	519.28	0.33	0.20
FEEDERS	HEAD	$	/HEAD			
GILTS	5.7 HEAD	$233.17	/HEAD	1324.40	0.84	0.51
BOARS	3.6 HEAD	$407.91	/HEAD	1468.48	0.93	0.56
BEDDING	13.3 TONNES	$ 25.87	/TONNE	344.73	0.22	0.13
VET.+MED.,CHEM.+DISINFECT.				2267.87	1.43	0.87
MANURE DISPOSAL (IF HIRED)				65.60	0.04	0.03
HIRED LABOUR	519.1 HOURS	$ 8.22	/HOUR	4265.54	2.69	1.63
HOG TRUCKING COSTS				1717.58	1.08	0.66
MARKETING & ASSEMBLY CHARG.				5384.12	3.40	2.06
TAXES,INSURANCE & UTILITIES				7382.89	4.66	2.83
MACH. BLDG. EQUIP. OPERATING & REP.				7262.15	4.58	2.78
ACCTNG, PROF. DUES & MISC.				2419.88	1.53	0.93
INTEREST-OPR.LOAN:LVSTK,FEED ETC.(15.5%)				4836.74	3.05	1.85
PAID INTEREST-CAPITAL LOANS				5730.72	3.62	2.19
OTHER CASH COSTS				44989.98	28.39	17.22
TOTAL CASH COSTS				138179.40	87.21	52.88
NON-CASH COSTS:						
OPERATOR'S LABOUR	1654.0 HOURS	$ 6.85	/HOUR	11330.15	7.15	4.34
FAMILY LABOUR	873.4 HOURS	$ 5.32	/HOUR	4643.04	2.93	1.78
DEPRECIATION (BLDG.+EQUIP.)				16624.47	10.49	6.36
TOTAL NON-CASH COSTS				32597.66	20.57	12.47
B. TOTAL PRODUCTION COSTS				170777.06	107.78	65.36
C. RETURN TO EQUITY (A-B)				65962.17	41.63	25.24

HEAD HANDLED	2647.0	DEATHLOSS %	4.0	CWT.LIVE WGHT.	3348.0	AVG. DRS. %	78.0
DRS.WT.EQ.CWT	2613.1	LB. DRS.WT/HOG	167.0	NO. HOG EQU.	1564.5	AVERAGE INDEX	103.7
LBS.FD/HOG EQ	860.0	HOME FEED %	55.9	HOG RECPT. %	76.7	SOWS	108.0
SOWS/BOAR	16.2	REPLACE GILTS	37.2	PGLTS WND/SOW	16.8	WNG AGE(DAYS)	30.0
GRS.MARGIN/CWT	37.7	NET INCOME/CWT	31.4	EQUITY INT. %	32.0	INVEST.INT. %	27.3

MEDIUM MANAGEMENT

ESTIMATED RETURNS AND COSTS OF HOG PRODUCTION IN ALBERTA

TYPE OF ENTERPRISE: FARROW-FINISH

				TOTAL	PER HOG	PER CWT DRESSED EQUIV.
RETURNS:						
944	- MARKET HOGS	1584.8 CWT DRS.	$ 83.28 /CWT	131979.56	133.44	76.62
20	SOWS	64.9 CWT DRS.	$ 63.63 /CWT	4130.64	4.18	2.40
2	BOARS	6.8 CWT DRS	$ 59.82 /CWT	409.20	0.41	0.24
33	- WEANERS	33.4 HEAD	$ 49.95 /HEAD	1670.26	1.69	0.97
1	- FEEDERS	1.3 HEAD	$ 65.46 /HEAD	85.69	0.09	0.05
11	- BREEDING STOCK	10.7 HEAD	$190.98 /HEAD	2038.27	2.06	1.18
GOVERNMENT SUPPORT PAYMENTS				5285.22	5.34	3.07
INV. CHANGE (SOW,GIL,FDRS,WNR)				8478.96	8.57	4.92
OTHER RECEIPTS				749.70	0.76	0.44
A. GROSS INCOME				154827.49	156.54	89.89
FEED COSTS:						
BARLEY		263.4 TONNES	$103.02 /TONNE	27131.65	27.43	15.75
OTHER GRAINS		19.3 TONNES	$129.46 /TONNE	2494.48	2.52	1.45
15	% DRY SOW RATION	7.3 TONNES	$162.32 /TONNE	1177.17	1.19	0.68
23	% NURSING SOW RATION	9.8 TONNES	$261.61 /TONNE	2571.27	2.60	1.49
19	% PRE-STARTER RATION	4.8 TONNES	$319.33 /TONNE	1522.61	1.54	0.88
18	% STARTER RATION	36.9 TONNES	$292.45 /TONNE	10779.69	10.90	6.26
16	% GROWER RATION	41.5 TONNES	$184.85 /TONNE	7662.03	7.75	4.45
15	% FINISHER RATION	14.3 TONNES	$184.86 /TONNE	2637.85	2.67	1.53
40	% PROTEIN SUPPLEMENT	19.7 TONNES	$372.80 /TONNE	7331.71	7.41	4.26
38	% PROTEIN SUPPLEMENT	0.2 TONNES	$424.25 /TONNE	68.07	0.07	0.04
42	% CANOLA MEAL	0.6 TONNES	$292.09 /TONNE	178.17	0.18	0.10
47	% SOYABEAN MEAL	10.6 TONNES	$348.08 /TONNE	3673.13	3.71	2.13
VIT.+MINERALS+SALT+LIMESTONE		3.5 TONNES	$ /TONNE	2013.20	2.04	1.17
FEED PROCESSING		0.8 TONNES	$ /TONNE	78.45	0.08	0.05
FEED TRUCKING COSTS		TONNES	$ 19.24 /TONNE	19.24	0.02	0.01
OTHER FEED ITEMS		1.8 TONNES	$ /TONNE	193.15	0.20	0.11
TOTAL FEED COSTS				69531.88	70.30	40.37
OTHER CASH COSTS:						
WEANERS		15.9 HEAD	$ 40.55 /HEAD	645.82	0.65	0.37
FEEDERS		1.7 HEAD	$ 41.54 /HEAD	72.51	0.07	0.04
GILTS		2.0 HEAD	$231.50 /HEAD	463.00	0.47	0.27
BOARS		2.4 HEAD	$443.93 /HEAD	1049.29	1.06	0.61
BEDDING		13.6 TONNES	$ 23.75 /TONNE	323.26	0.33	0.19
VET.+MED.,CHEM.+DISINFECT.				1664.20	1.68	0.97
MANURE DISPOSAL (IF HIRED)				323.27	0.33	0.19
HIRED LABOUR		490.6 HOURS	$ 8.39 /HOUR	4114.35	4.16	2.39
HOG TRUCKING COSTS				1003.60	1.01	0.58
MARKETING & ASSEMBLY CHARG.				3400.97	3.44	1.97
TAXES,INSURANCE & UTILITIES				4354.18	4.40	2.53
MACH. BLDG. EQUIP. OPERATING & REP.				7662.31	7.75	4.45
ACCTNG, PROF. DUES & MISC.				2943.43	2.98	1.71
INTEREST-OPR.LOAN:LVSTK,FEED ETC.(15.5%)				3721.54	3.76	2.16
PAID INTEREST-CAPITAL LOANS				3358.84	3.40	1.95
OTHER CASH COSTS				35100.56	35.49	20.38
TOTAL CASH COSTS				104632.44	105.79	60.75
NON-CASH COSTS:						
OPERATOR'S LABOUR		1421.7 HOURS	$ 6.85 /HOUR	9746.18	9.85	5.66
FAMILY LABOUR		911.4 HOURS	$ 5.13 /HOUR	4672.58	4.72	2.71
DEPRECIATION (BLDG.+EQUIP.)				13412.62	13.56	7.79
TOTAL NON-CASH COSTS				27831.38	28.14	16.16
B. TOTAL PRODUCTION COSTS				132463.82	133.93	76.91
C. RETURN TO EQUITY (A-B)				22363.67	22.61	12.98

HEAD HANDLED	1741.0	DEATHLOSS %	3.5	CWT.LIVE WGHT.	2205.7	AVG. DRS. %	78.1
DRS.WT.EQ.CWT	1722.4	LB. DRS.WT/HOG	167.9	NO. HOG EQU.	1025.6	AVERAGE INDEX	102.6
LBS.FD/HOG EQ	954.5	HOME FEED %	59.5	HOG RECPT. %	66.7	SOWS	73.4
SOWS/BOAR	14.1	REPLACE GILTS	29.4	PGLTS WND/SOW	15.8	WNG AGE(DAYS)	35.1
GRS.MARGIN/CWT	29.1	NET INCOME/CWT	21.4	EQUITY INT. %	12.6	INVEST.INT. %	12.3

LOW MANAGEMENT

ESTIMATED RETURNS AND COSTS OF HOG PRODUCTION IN ALBERTA

TYPE OF ENTERPRISE: FARROW-FINISH

				TOTAL	PER HOG	PER CWT DRESSED EQUIV.
RETURNS:						
186 - MARKET HOGS	307.9 CWT DRS.	$ 78.43	/CWT	24151.42	116.87	69.11
6 SOWS	22.3 CWT DRS.	$ 59.05	/CWT	1319.71	6.39	3.78
2 BOARS	6.3 CWT DRS	$ 82.00	/CWT	518.24	2.51	1.48
5 - WEANERS	4.6 HEAD	$ 41.08	/HEAD	188.21	0.91	0.54
4 - FEEDERS	4.3 HEAD	$ 64.96	/HEAD	277.95	1.35	0.80
12 - BREEDING STOCK	12.2 HEAD	$165.83	/HEAD	2016.91	9.76	5.77
GOVERNMENT SUPPORT PAYMENTS				785.26	3.80	2.25
INV. CHANGE (SOW,GIL,FDRS,WNR)				1615.71	7.82	4.62
OTHER RECEIPTS				332.35	1.61	0.95
A. GROSS INCOME				31205.76	151.01	89.30
FEED COSTS:						
BARLEY	85.3 TONNES	$105.52	/TONNE	9001.42	43.56	25.76
OTHER GRAINS	13.7 TONNES	$127.24	/TONNE	1744.46	8.44	4.99
14 % DRY SOW RATION	1.0 TONNES	$218.51	/TONNE	218.03	1.06	0.62
36 % NURSING SOW RATION	1.0 TONNES	$399.92	/TONNE	402.99	1.95	1.15
20 % PRE-STARTER RATION	0.4 TONNES	$387.96	/TONNE	149.14	0.72	0.43
18 % STARTER RATION	4.6 TONNES	$317.29	/TONNE	1447.78	7.01	4.14
16 % GROWER RATION	4.6 TONNES	$193.62	/TONNE	889.91	4.31	2.55
16 % FINISHER RATION	0.3 TONNES	$200.00	/TONNE	55.81	0.27	0.16
40 % PROTEIN SUPPLEMENT	2.0 TONNES	$409.91	/TONNE	811.15	3.93	2.32
41 % PROTEIN SUPPLEMENT	0.1 TONNES	$387.31	/TONNE	29.95	0.14	0.09
47 % CANOLA MEAL	0.3 TONNES	$227.90	/TONNE	59.15	0.29	0.17
46 % SOYABEAN MEAL	3.2 TONNES	$381.24	/TONNE	1227.67	5.94	3.51
VIT.+MINERALS+SALT+LIMESTONE	0.5 TONNES	$	/TONNE	265.51	1.28	0.76
FEED PROCESSING	TONNES	$	/TONNE	84.83	0.41	0.24
FEED TRUCKING COSTS	TONNES	$	/TONNE			
OTHER FEED ITEMS	1.8 TONNES	$	/TONNE	103.87	0.50	0.30
TOTAL FEED COSTS				16491.66	79.80	47.19
OTHER CASH COSTS:						
WEANERS	5.8 HEAD	$ 35.99	/HEAD	210.09	1.02	0.60
FEEDERS	0.3 HEAD	$ 50.00	/HEAD	17.44	0.08	0.05
GILTS	0.5 HEAD	$297.05	/HEAD	151.98	0.74	0.43
BOARS	0.8 HEAD	$246.32	/HEAD	194.77	0.94	0.56
BEDDING	9.5 TONNES	$ 21.55	/TONNE	205.17	0.99	0.59
VET.+MED.,CHEM.+DISINFECT.				389.37	1.88	1.11
MANURE DISPOSAL (IF HIRED)				38.70	0.19	0.11
HIRED LABOUR	168.5 HOURS	$ 6.48	/HOUR	1091.75	5.28	3.12
HOG TRUCKING COSTS				315.26	1.53	0.90
MARKETING & ASSEMBLY CHARG.				774.53	3.75	2.22
TAXES,INSURANCE & UTILITIES				2103.34	10.18	6.02
MACH. BLDG. EQUIP. OPERATING & REP.				3531.57	17.09	10.11
ACCTNG, PROF. DUES & MISC.				530.41	2.57	1.52
INTEREST-OPR.LOAN:LVSTK,FEED ETC.(15.5%)				995.85	4.82	2.85
PAID INTEREST-CAPITAL LOANS				3092.90	14.97	8.85
OTHER CASH COSTS				13643.11	66.02	39.04
TOTAL CASH COSTS				30134.77	145.82	86.23
NON-CASH COSTS:						
OPERATOR'S LABOUR	1001.5 HOURS	$ 6.85	/HOUR	6830.04	33.05	19.54
FAMILY LABOUR	123.4 HOURS	$ 4.28	/HOUR	528.29	2.56	1.51
DEPRECIATION (BLDG.+EQUIP.)				4590.45	22.21	13.14
TOTAL NON-CASH COSTS				11948.79	57.82	34.19
B. TOTAL PRODUCTION COSTS				42083.56	203.65	120.42
C. RETURN TO EQUITY (A-B)				-10877.80	-52.64	-31.13

HEAD HANDLED	417.0	DEATHLOSS %	3.9	CWT.LIVE WGHT.	447.7	AVG. DRS. %	78.1
DRS.WT.EQ.CWT	349.5	LB. DRS.WT/HOG	165.9	NO. HOG EQU.	210.7	AVERAGE INDEX	100.6
LBS.FD/HOG EQ	1249.2	HOME FEED %	74.2	HOG RECPT. %	64.5	SOWS	22.3
SOWS/BOAR	9.7	REPLACE GILTS	8.9	PGLTS WND/SOW	12.1	WNG AGE(DAYS)	41.1
GRS.MARGIN/CWT	3.1	NET INCOME/CWT	-10.1	EQUITY INT. %	-22.5	INVEST.INT. %	-11.4

HIGH MANAGEMENT

ESTIMATED RETURNS AND COSTS OF HOG PRODUCTION IN ALBERTA

	TYPE OF ENTERPRISE: FINISHING				TOTAL	PER HOG	PER CWT DRESSED EQUIV.
RETURNS:							
914	- MARKET HOGS	1568.7 CWT DRS.	$ 83.57	/CWT	131097.84	141.65	102.94
	SOWS	0.1 CWT DRS.	$ 71.90	/CWT	8.34	0.01	0.01
	BOARS	CWT DRS	$	/CWT			
	- WEANERS	HEAD	$	/HEAD			
	- FEEDERS	HEAD	$	/HEAD			
12	- BREEDING STOCK	11.9 HEAD	$162.89	/HEAD	1933.00	2.09	1.52
GOVERNMENT SUPPORT PAYMENTS					5238.30	5.66	4.11
INV. CHANGE (SOW,GIL,FDRS,WNR)					2458.01	2.66	1.93
OTHER RECEIPTS					551.20	0.60	0.43
A. GROSS INCOME					141286.69	152.65	110.94
FEED COSTS:							
BARLEY		101.5 TONNES	$105.10	/TONNE	10671.62	11.53	8.38
OTHER GRAINS		14.6 TONNES	$124.55	/TONNE	1815.76	1.96	1.43
	% DRY SOW RATION	TONNES	$	/TONNE			
	% NURSING SOW RATION	TONNES	$	/TONNE			
	% PRE-STARTER RATION	TONNES	$	/TONNE			
18	% STARTER RATION	3.4 TONNES	$268.50	/TONNE	909.33	0.98	0.71
16	% GROWER RATION	114.6 TONNES	$183.63	/TONNE	21049.93	22.74	16.53
14	% FINISHER RATION	5.6 TONNES	$163.94	/TONNE	924.27	1.00	0.73
40	% PROTEIN SUPPLEMENT	6.6 TONNES	$399.02	/TONNE	2614.40	2.82	2.05
	% PROTEIN SUPPLEMENT	TONNES	$	/TONNE			
37	% CANOLA MEAL	1.9 TONNES	$200.24	/TONNE	382.60	0.41	0.30
37	% SOYABEAN MEAL	4.9 TONNES	$366.84	/TONNE	1780.40	1.92	1.40
VIT.+MINERALS+SALT+LIMESTONE		3.3 TONNES	$	/TONNE	1731.40	1.87	1.36
FEED PROCESSING		TONNES	$	/TONNE	129.13	0.14	0.10
FEED TRUCKING COSTS		TONNES	$ 98.27	/TONNE	98.27	0.11	0.08
OTHER FEED ITEMS		0.3 TONNES	$	/TONNE	193.90	0.21	0.15
	TOTAL FEED COSTS				42301.01	45.70	33.22
OTHER CASH COSTS:							
WEANERS		640.5 HEAD	$ 48.11	/HEAD	30814.34	33.29	24.20
FEEDERS		345.4 HEAD	$ 56.38	/HEAD	19473.13	21.04	15.29
GILTS		HEAD	$	/HEAD			
BOARS		HEAD	$	/HEAD			
BEDDING		0.4 TONNES	$ 26.19	/TONNE	9.74	0.01	0.01
VET.+MED.,CHEM.+DISINFECT.					144.93	0.16	0.11
MANURE DISPOSAL (IF HIRED)					491.13	0.53	0.39
HIRED LABOUR		HOURS	$	/HOUR			
HOG TRUCKING COSTS					1279.80	1.38	1.00
MARKETING & ASSEMBLY CHARG.					2982.47	3.22	2.34
TAXES,INSURANCE & UTILITIES					1814.10	1.96	1.42
MACH. BLDG. EQUIP. OPERATING & REP.					3170.88	3.43	2.49
ACCTNG, PROF. DUES & MISC.					2637.58	2.85	2.07
INTEREST-OPR.LOAN:LVSTK,FEED ETC.(15.5%)					4073.37	4.40	3.20
PAID INTEREST-CAPITAL LOANS					1546.55	1.67	1.21
	OTHER CASH COSTS				68438.03	73.94	53.74
	TOTAL CASH COSTS				110739.04	119.65	86.95
NON-CASH COSTS:							
OPERATOR'S LABOUR		843.1 HOURS	$ 6.85	/HOUR	5775.01	6.24	4.53
FAMILY LABOUR		HOURS	$	/HOUR			
DEPRECIATION (BLDG.+EQUIP.)					4834.29	5.22	3.80
	TOTAL NON-CASH COSTS				10609.30	11.46	8.33
B. TOTAL PRODUCTION COSTS					121348.34	131.11	95.28
C. RETURN TO EQUITY (A-B)					19938.36	21.54	15.66

HEAD HANDLED	1389.1	DEATHLOSS %	2.5	CWT.LIVE WGHT.	1631.9	AVG. DRS. %	78.0
DRS.WT.EQ.CWT	1273.5	LB. DRS.WT/HOG	171.7	NO. HOG EQU.	741.7	AVERAGE INDEX	103.6
LBS.FD/HOG EQ	758.4	HOME FEED %	24.9	HOG RECPT. %	65.4	AVG FEED CONV	3.5
LB.AVG.DLY.GN.	1.0	AV.DAYS ON FD	214.9				

GRS.MARGIN/CWT	24.0	NET INCOME/CWT	20.2	EQUITY INT. %	38.2	INVEST.INT. %	33.1

MEDIUM MANAGEMENT

ESTIMATED RETURNS AND COSTS OF HOG PRODUCTION IN ALBERTA

TYPE OF ENTERPRISE: FINISHING

					TOTAL	PER HOG	PER CWT DRESSED EQUIV.
RETURNS:							
918	- MARKET HOGS	1551.4	CWT DRS.	$ 83.75 /CWT	129931.58	141.52	109.11
	SOWS	0.9	CWT DRS.	$ 84.33 /CWT	72.64	0.08	0.06
	BOARS	0.4	CWT DRS	$ 53.73 /CWT	19.29	0.02	0.02
	- WEANERS		HEAD	$ /HEAD			
	- FEEDERS		HEAD	$ /HEAD			
	- BREEDING STOCK		HEAD	$ /HEAD			
GOVERNMENT SUPPORT PAYMENTS					3643.43	3.97	3.06
INV. CHANGE (SOW,GIL,FDRS,WNR)					557.54	0.61	0.47
OTHER RECEIPTS					149.02	0.16	0.13
A. GROSS INCOME					134373.49	146.35	112.84
FEED COSTS:							
BARLEY		203.9	TONNES	$103.12 /TONNE	21024.68	22.90	17.66
OTHER GRAINS		13.2	TONNES	$140.79 /TONNE	1860.29	2.03	1.56
	% DRY SOW RATION		TONNES	$ /TONNE			
	% NURSING SOW RATION		TONNES	$ /TONNE			
17	% PRE-STARTER RATION	2.0	TONNES	$260.73 /TONNE	523.33	0.57	0.44
18	% STARTER RATION	9.7	TONNES	$306.49 /TONNE	2970.74	3.24	2.49
16	% GROWER RATION	55.1	TONNES	$171.27 /TONNE	9443.02	10.28	7.93
	% FINISHER RATION		TONNES	$ /TONNE			
40	% PROTEIN SUPPLEMENT	17.9	TONNES	$387.32 /TONNE	6922.86	7.54	5.81
	% PROTEIN SUPPLEMENT	3.2	TONNES	$400.00 /TONNE	1296.00	1.41	1.09
	% CANOLA MEAL		TONNES	$ /TONNE			
47	% SOYABEAN MEAL	3.9	TONNES	$302.29 /TONNE	1174.62	1.28	0.99
VIT.+MINERALS+SALT+LIMESTONE		1.2	TONNES	$ /TONNE	352.38	0.38	0.30
FEED PROCESSING			TONNES	$ /TONNE			
FEED TRUCKING COSTS			TONNES	$ /TONNE			
OTHER FEED ITEMS		1.1	TONNES	$ /TONNE	75.79	0.08	0.06
TOTAL FEED COSTS					45643.71	49.71	38.33
OTHER CASH COSTS:							
WEANERS		545.1	HEAD	$ 48.31 /HEAD	26332.00	28.68	22.11
FEEDERS		436.6	HEAD	$ 61.08 /HEAD	26666.63	29.04	22.39
GILTS			HEAD	$ /HEAD			
BOARS		0.1	HEAD	$400.00 /HEAD	57.14	0.06	0.05
BEDDING		2.2	TONNES	$ 25.91 /TONNE	57.48	0.06	0.05
VET.+MED.,CHEM.+DISINFECT.					590.93	0.64	0.50
MANURE DISPOSAL (IF HIRED)					78.57	0.09	0.07
HIRED LABOUR		30.4	HOURS	$ 5.52 /HOUR	167.86	0.18	0.14
HOG TRUCKING COSTS					1129.62	1.23	0.95
MARKETING & ASSEMBLY CHARG.					2952.71	3.22	2.48
TAXES,INSURANCE & UTILITIES					2512.56	2.74	2.11
MACH. BLDG. EQUIP. OPERATING & REP.					4805.47	5.23	4.04
ACCTNG, PROF. DUES & MISC.					2295.21	2.50	1.93
INTEREST-OPR.LOAN:LVSTK,FEED ETC.(15.5%)					4387.77	4.78	3.68
PAID INTEREST-CAPITAL LOANS					3192.56	3.48	2.68
OTHER CASH COSTS					75226.51	81.93	63.17
TOTAL CASH COSTS					120870.22	131.65	101.50
NON-CASH COSTS:							
OPERATOR'S LABOUR		1092.3	HOURS	$ 6.85 /HOUR	7481.77	8.15	6.28
FAMILY LABOUR		288.8	HOURS	$ 4.43 /HOUR	1280.21	1.39	1.08
DEPRECIATION (BLDG.+EQUIP.)					7722.45	8.41	6.48
TOTAL NON-CASH COSTS					16484.43	17.95	13.84
B. TOTAL PRODUCTION COSTS					137354.66	149.60	115.34
C. RETURN TO EQUITY (A-B)					-2981.16	-3.25	-2.50

HEAD HANDLED	1410.6	DEATHLOSS %	6.6	CWT.LIVE WGHT.	1529.0	AVG. DRS. %	77.9
DRS.WT.EQ.CWT	1190.9	LB. DRS.WT/HOG	169.0	NO. HOG EQU.	704.8	AVERAGE INDEX	101.3
LBS.FD/HOG EQ	980.9	HOME FEED %	50.1	HOG RECPT. %	73.2	AVG FEED CONV	4.5
LB.AVG.DLY.GN.	1.0	AV.DAYS ON FD	220.3				

GRS.MARGIN/CWT	11.3	NET INCOME/CWT	4.9	EQUITY INT. %	0.3	INVEST.INT. %	0.2

LOW MANAGEMENT

ESTIMATED RETURNS AND COSTS OF HOG PRODUCTION IN ALBERTA

TYPE OF ENTERPRISE: FINISHING

					TOTAL	PER HOG	PER CWT DRESSED EQUIV.
RETURNS:							
208	- MARKET HOGS	354.6 CWT DRS.	$ 81.41	/CWT	28866.07	138.69	121.68
2	SOWS	4.4 CWT DRS.	$ 66.28	/CWT	293.73	1.41	1.24
	BOARS	0.5 CWT DRS	$ 63.35	/CWT	28.91	0.14	0.12
1	- WEANERS	0.6 HEAD	$ 28.50	/HEAD	18.14	0.09	0.08
	- FEEDERS	HEAD	$	/HEAD			
	- BREEDING STOCK	HEAD	$	/HEAD			
GOVERNMENT SUPPORT PAYMENTS					967.37	4.65	4.08
INV. CHANGE (SOW,GIL,FDRS,WNR)					(3654.40)	(17.56)	(15.40)
OTHER RECEIPTS					120.95	0.58	0.51
A. GROSS INCOME					26640.77	128.00	112.30
FEED COSTS:							
BARLEY		41.0 TONNES	$104.58	/TONNE	4287.89	20.60	18.07
OTHER GRAINS		6.7 TONNES	$ 93.28	/TONNE	629.60	3.02	2.65
	% DRY SOW RATION	TONNES	$	/TONNE			
35	% NURSING SOW RATION	TONNES	$380.00	/TONNE	0.86		
	% PRE-STARTER RATION	TONNES	$	/TONNE			
18	% STARTER RATION	0.6 TONNES	$325.69	/TONNE	179.95	0.86	0.76
16	% GROWER RATION	19.9 TONNES	$178.62	/TONNE	3560.06	17.10	15.01
14	% FINISHER RATION	0.3 TONNES	$149.60	/TONNE	51.00	0.25	0.21
40	% PROTEIN SUPPLEMENT	3.0 TONNES	$396.46	/TONNE	1176.24	5.65	4.96
	% PROTEIN SUPPLEMENT	TONNES	$	/TONNE			
	% CANOLA MEAL	TONNES	$	/TONNE			
47	% SOYABEAN MEAL	1.6 TONNES	$324.96	/TONNE	524.96	2.52	2.21
VIT.+MINERALS+SALT+LIMESTONE		0.4 TONNES	$	/TONNE	278.61	1.34	1.17
FEED PROCESSING		TONNES	$	/TONNE	9.81	0.05	0.04
FEED TRUCKING COSTS		TONNES	$	/TONNE			
OTHER FEED ITEMS		1.2 TONNES	$	/TONNE	68.18	0.33	0.29
TOTAL FEED COSTS					10767.17	51.73	45.39
OTHER CASH COSTS:							
WEANERS		118.7 HEAD	$ 52.25	/HEAD	6203.17	29.80	26.15
FEEDERS		51.4 HEAD	$ 79.07	/HEAD	4061.53	19.51	17.12
GILTS		1.3 HEAD	$174.24	/HEAD	229.68	1.10	0.97
BOARS		0.1 HEAD	$167.50	/HEAD	15.23	0.07	0.06
BEDDING		2.9 TONNES	$ 25.73	/TONNE	74.71	0.36	0.31
VET.+MED.,CHEM.+DISINFECT.					375.93	1.81	1.58
MANURE DISPOSAL (IF HIRED)					204.55	0.98	0.86
HIRED LABOUR		17.3 HOURS	$ 5.82	/HOUR	100.45	0.48	0.42
HOG TRUCKING COSTS					74.38	0.36	0.31
MARKETING & ASSEMBLY CHARG.					926.98	4.45	3.91
TAXES,INSURANCE & UTILITIES					1028.59	4.94	4.34
MACH. BLDG. EQUIP. OPERATING & REP.					1938.64	9.31	8.17
ACCTNG, PROF. DUES & MISC.					366.34	1.76	1.54
INTEREST-OPR.LOAN:LVSTK,FEED ETC.(15.5%)					1012.24	4.86	4.27
PAID INTEREST-CAPITAL LOANS					1439.75	6.92	6.07
OTHER CASH COSTS					18052.19	86.73	76.10
TOTAL CASH COSTS					28819.35	138.46	121.48
NON-CASH COSTS:							
OPERATOR'S LABOUR		671.3 HOURS	$ 6.85	/HOUR	4597.91	22.09	19.38
FAMILY LABOUR		9.0 HOURS	$ 3.43	/HOUR	30.94	0.15	0.13
DEPRECIATION (BLDG.+EQUIP.)					2952.99	14.19	12.45
TOTAL NON-CASH COSTS					7581.84	36.43	31.96
B. TOTAL PRODUCTION COSTS					36401.19	174.89	153.44
C. RETURN TO EQUITY (A-B)					-9760.42	-46.89	-41.14

HEAD HANDLED	318.6	DEATHLOSS %	4.1	CWT.LIVE WGHT.	302.7	AVG. DRS. %	78.4
DRS.WT.EQ.CWT	237.2	LB. DRS.WT/HOG	170.9	NO. HOG EQU.	138.8	AVERAGE INDEX	100.5
LBS.FD/HOG EQ	1182.2	HOME FEED %	71.4	HOG RECPT. %	66.7	AVG FEED CONV	5.4
LB.AVG.DLY.GN.	0.8	AV.DAYS ON FD	281.3				

GRS.MARGIN/CWT	-9.2	NET INCOME/CWT	-21.6	EQUITY INT. %	-27.4	INVEST.INT. %	-18.6

HIGH MANAGEMENT

ESTIMATED RETURNS AND COSTS OF HOG PRODUCTION IN ALBERTA

TYPE OF ENTERPRISE: FARROW-WEAN

					TOTAL	PER SOW	PER WEANER EQUIV.
RETURNS:							
77	- MARKET HOGS	125.7	CWT DRS.	$ 84.89 /CWT	10671.83	92.13	4.87
24	SOWS	77.0	CWT DRS.	$ 65.88 /CWT	5074.67	43.81	2.31
2	BOARS	4.3	CWT DRS	$ 61.78 /CWT	265.67	2.29	0.12
1631	- WEANERS	1630.5	HEAD	$ 46.02 /HEAD	75043.50	647.86	34.23
	- FEEDERS		HEAD	$ /HEAD			
25	- BREEDING STOCK	25.0	HEAD	$200.00 /HEAD	5000.00	43.17	2.28
GOVERNMENT SUPPORT PAYMENTS							
INV. CHANGE (SOW,GIL,FDRS,WNR)					8188.05	70.69	3.73
OTHER RECEIPTS					135.27	1.17	0.06
A. GROSS INCOME					104378.98	901.11	47.61
FEED COSTS:							
BARLEY		150.9	TONNES	$105.19 /TONNE	15878.37	137.08	7.24
OTHER GRAINS		44.3	TONNES	$106.65 /TONNE	4724.96	40.79	2.16
14	% DRY SOW RATION	4.3	TONNES	$170.33 /TONNE	731.30	6.31	0.33
26	% NURSING SOW RATION	18.8	TONNES	$190.55 /TONNE	3574.95	30.86	1.63
20	% PRE-STARTER RATION		TONNES	$493.33 /TONNE	12.33	0.11	0.01
19	% STARTER RATION	11.5	TONNES	$305.70 /TONNE	3506.92	30.28	1.60
	% GROWER RATION		TONNES	$ /TONNE			
	% FINISHER RATION		TONNES	$ /TONNE			
40	% PROTEIN SUPPLEMENT	1.5	TONNES	$406.19 /TONNE	590.67	5.10	0.27
35	% PROTEIN SUPPLEMENT	0.7	TONNES	$765.99 /TONNE	566.83	4.89	0.26
	% CANOLA MEAL		TONNES	$ /TONNE			
47	% SOYABEAN MEAL	17.8	TONNES	$356.22 /TONNE	6346.00	54.79	2.89
VIT.+MINERALS+SALT+LIMESTONE		5.4	TONNES	$ /TONNE	1624.67	14.03	0.74
FEED PROCESSING & TRUCKING		6.5	TONNES	$ /TONNE	343.33	2.96	0.16
OTHE FEED ITEMS		2.2	TONNES	$ /TONNE	324.33	2.80	0.15
TOTAL FEED COSTS					38224.66	330.00	17.43
OTHER CASH COSTS:							
WEANERS			HEAD	$ /HEAD			
FEEDERS			HEAD	$ /HEAD			
GILTS		1.3	HEAD	$237.50 /HEAD	316.67	2.73	0.14
BOARS		1.2	HEAD	$274.29 /HEAD	320.00	2.76	0.15
BEDDING		27.0	TONNES	$ 26.95 /TONNE	726.54	6.27	0.33
VET.+MED.,CHEM.+DISINFECT.					1609.69	13.90	0.73
MANURE DISPOSAL (IF HIRED)					264.17	2.28	0.12
HIRED LABOUR		621.2	HOURS	$ 6.85 /HOUR	4254.99	36.73	1.94
HOG TRUCKING COSTS					38.67	0.33	0.02
MARKETING & ASSEMBLY CHARG.					344.17	2.97	0.16
TAXES,INSURANCE & UTILITIES					4144.62	35.78	1.89
MACH. BLDG. EQUIP. OPERATING & REP.					3442.72	29.72	1.57
ACCTNG, PROF. DUES & MISC.					177.67	1.53	0.08
INTEREST-OPR.LOAN:LVSTK,FEED ETC.(15.5%)					2086.99	18.02	0.95
PAID INTEREST-CAPITAL LOANS					7537.02	65.07	3.44
OTHER CASH COSTS					25263.92	218.10	11.53
TOTAL CASH COSTS					63488.58	558.10	28.96
NON-CASH COSTS:							
OPERATOR'S LABOUR		970.5	HOURS	$ 6.85 /HOUR	11292.51	97.49	5.15
FAMILY LABOUR		28.8	HOURS	$ 3.43 /HOUR	98.90	0.85	0.05
DEPRECIATION (BLDG.+EQUIP.)					7666.76	66.19	3.50
TOTAL NON-CASH COSTS					19058.17	164.53	8.69
B. TOTAL PRODUCTION COSTS					82546.74	712.63	37.65
C. RETURN TO EQUITY (A-B)					21832.25	188.48	9.96

HEAD HANDLED	2056.2	DEATHLOSS %	2.2	CWT.LIVE WGHT.	870.4		
WEAN.SOLD/SOW	14.1	AV.WEANER WT.	39.7	NO.WEAN EQU.	2192.5	LBS.FEED/SOW	4936.8
LBS.FD/WEAN.EQ	260.8	HOME FEED %	57.7	HOG RECPT. %	86.1	SOWS	115.8
SOWS/BOAR	19.9	REPLACE GILTS	27.0	PGLTS WND/SOW	16.4	WNG AGE(DAYS)	33.0
GRS.MARGIN/WNR	17.3	NET INCOME/WNR	15.2	EQUITY INT. %	20.5	INVEST.INT. %	19.3

MEDIUM MANAGEMENT

ESTIMATED RETURNS AND COSTS OF HOG PRODUCTION IN ALBERTA

TYPE OF ENTERPRISE: FARROW-WEAN

					TOTAL	PER SOW	PER WEANER EQUIV.
RETURNS:							
43	- MARKET HOGS	71.1	CWT DRS.	$ 82.34 /CWT	5852.64	78.42	5.42
18	SOWS	58.4	CWT DRS.	$ 61.61 /CWT	3595.64	48.18	3.33
2	BOARS	6.8	CWT DRS	$ 39.73 /CWT	268.36	3.60	0.25
800	- WEANERS	799.9	HEAD	$ 52.88 /HEAD	42296.21	566.70	39.17
	- FEEDERS	0.3	HEAD	$103.33 /HEAD	28.18	0.38	0.03
	- BREEDING STOCK		HEAD	$ /HEAD			
GOVERNMENT SUPPORT PAYMENTS					229.00	3.07	0.21
INV. CHANGE (SOW,GIL,FDRS,WNR)					6544.92	87.69	6.06
OTHER RECEIPTS					24.01	0.32	0.02
A. GROSS INCOME					58838.97	788.34	54.48
FEED COSTS:							
BARLEY		94.1	TONNES	$102.33 /TONNE	9630.48	129.03	8.92
OTHER GRAINS		13.7	TONNES	$116.94 /TONNE	1605.77	21.51	1.49
14	% DRY SOW RATION	10.0	TONNES	$184.97 /TONNE	1844.68	24.72	1.71
33	% NURSING SOW RATION	8.6	TONNES	$313.13 /TONNE	2701.45	36.19	2.50
	% PRE-STARTER RATION	1.0	TONNES	$392.81 /TONNE	392.45	5.26	0.36
18	% STARTER RATION	21.7	TONNES	$324.71 /TONNE	7057.50	94.56	6.54
16	% GROWER RATION	3.6	TONNES	$190.25 /TONNE	685.76	9.19	0.63
	% FINISHER RATION		TONNES	$ /TONNE			
40	% PROTEIN SUPPLEMENT	1.2	TONNES	$399.01 /TONNE	475.91	6.38	0.44
	% PROTEIN SUPPLEMENT		TONNES	$ /TONNE			
	% CANOLA MEAL	1.3	TONNES	$209.79 /TONNE	272.73	3.65	0.25
	% SOYABEAN MEAL	0.6	TONNES	$358.00 /TONNE	211.55	2.83	0.20
VIT.+MINERALS+SALT+LIMESTONE		0.7	TONNES	$ /TONNE	349.37	4.68	0.32
FEED PROCESSING & TRUCKING			TONNES	$ /TONNE	144.55	1.94	0.13
OTHER FEED ITEMS		2.2	TONNES	$ /TONNE	116.67	1.56	0.11
TOTAL FEED COSTS					25488.87	341.51	23.60
OTHER CASH COSTS:							
WEANERS		0.1	HEAD	$ 40.00 /HEAD	3.64	0.05	
FEEDERS			HEAD	$ /HEAD			
GILTS			HEAD	$ /HEAD			
BOARS		1.7	HEAD	$411.11 /HEAD	710.09	9.51	0.66
BEDDING		18.9	TONNES	$ 27.30 /TONNE	516.83	6.92	0.48
VET.+MED.,CHEM.+DISINFECT.					1282.59	17.18	1.19
MANURE DISPOSAL (IF HIRED)					64.55	0.86	0.06
HIRED LABOUR			HOURS	$ /HOUR			
HOG TRUCKING COSTS					291.74	3.91	0.27
MARKETING & ASSEMBLY CHARG.					2584.20	34.62	2.39
TAXES,INSURANCE & UTILITIES					5527.85	74.07	5.12
MACH. BLDG. EQUIP. OPERATING & REP.					4821.93	64.61	4.47
ACCTNG, PROF. DUES & MISC.					359.68	4.82	0.33
INTEREST-OPR.LOAN:LVSTK,FEED ETC.(15.5%)					1402.88	18.80	1.30
PAID INTEREST-CAPITAL LOANS					4074.53	54.59	3.77
. OTHER CASH COSTS					16902.03	226.46	15.64
TOTAL CASH COSTS					42390.90	567.97	39.24
NON-CASH COSTS:							
OPERATOR'S LABOUR		1806.3	HOURS	$ 6.85 /HOUR	12372.81	165.77	11.46
FAMILY LABOUR		746.6	HOURS	$ 4.30 /HOUR	3207.84	42.98	2.97
DEPRECIATION (BLDG.+EQUIP.)					5117.30	68.56	4.74
TOTAL NON-CASH COSTS					20697.95	277.31	19.18
B. TOTAL PRODUCTION COSTS					63088.85	845.28	58.42
C. RETURN TO EQUITY (A-B)					-4249.88	-56.94	-3.94

HEAD HANDLED	984.0	DEATHLOSS %	1.9	CWT.LIVE WGHT.	465.4		
WEAN.SOLD/SOW	10.7	AV.WEANER WT.	43.1	NO.WEAN EQU.	1079.9	LBS.FEED/SOW	4687.9
LBS.FD/WEAN.EQ	324.0	HOME FEED %	64.3	HOG RECPT. %	82.2	SOWS	74.6
SOWS/BOAR	17.1	REPLACE GILTS	23.8	PGLTS WND/SOW	14.9	WNG AGE(DAYS)	33.8
GRS.MARGIN/WNR	5.2	NET INCOME/WNR	10.5	EQUITY INT. %	-7.2	INVEST.INT. %	-0.2

LOW MANAGEMENT

ESTIMATED RETURNS AND COSTS OF HOG PRODUCTION IN ALBERTA

TYPE OF ENTERPRISE: FARROW-WEAN

					TOTAL	PER SOW	PER WEANER EQUIV.
RETURNS:							
13	- MARKET HOGS	20.6	CWT DRS.	$ 79.55 /CWT	1635.29	21.48	2.11
13	SOWS	41.8	CWT DRS.	$ 53.97 /CWT	2256.86	29.64	2.91
1	BOARS	3.0	CWT DRS	$ 63.29 /CWT	189.86	2.49	0.25
564	- WEANERS	564.3	HEAD	$ 45.92 /HEAD	25912.29	340.31	33.45
	- FEEDERS	0.1	HEAD	$ 61.00 /HEAD	8.71	0.11	0.01
7	- BREEDING STOCK	7.3	HEAD	$216.37 /HEAD	1576.43	20.70	2.04
GOVERNMENT SUPPORT PAYMENTS							
INV. CHANGE (SOW,GIL,FDRS,WNR)					5168.45	67.88	6.67
OTHER RECEIPTS					40.49	0.53	0.05
A. GROSS INCOME					36788.36	483.15	47.50
FEED COSTS:							
BARLEY		38.9	TONNES	$ 98.64 /TONNE	3840.38	50.44	4.96
OTHER GRAINS		65.6	TONNES	$ 98.35 /TONNE	6447.14	84.67	8.32
	% DRY SOW RATION		TONNES	$ /TONNE			
18	% NURSING SOW RATION	9.2	TONNES	$175.79 /TONNE	1624.79	21.34	2.10
20	% PRE-STARTER RATION	3.6	TONNES	$391.20 /TONNE	1397.14	18.35	1.80
18	% STARTER RATION	3.2	TONNES	$329.85 /TONNE	1052.00	13.82	1.36
	% GROWER RATION		TONNES	$ /TONNE			
	% FINISHER RATION		TONNES	$ /TONNE			
40	% PROTEIN SUPPLEMENT	0.2	TONNES	$454.55 /TONNE	71.43	0.94	0.09
	% PROTEIN SUPPLEMENT	0.2	TONNES	$414.00 /TONNE	88.71	1.17	0.11
	% CANOLA MEAL		TONNES	$ /TONNE			
47	% SOYABEAN MEAL	14.6	TONNES	$331.58 /TONNE	4826.00	63.38	6.23
VIT.+MINERALS+SALT+LIMESTONE		6.8	TONNES	$ /TONNE	3980.71	52.28	5.14
FEED PROCESSING & TRUCKING			TONNES	$ /TONNE			
OTHER FEED ITEMS			TONNES	$ /TONNE			
TOTAL FEED COSTS					23328.30	306.38	30.12
OTHER CASH COSTS:							
WEANERS			HEAD	$ /HEAD			
FEEDERS			HEAD	$ /HEAD			
GILTS		1.4	HEAD	$271.50 /HEAD	387.86	5.09	0.50
BOARS		1.1	HEAD	$325.00 /HEAD	371.43	4.88	0.48
BEDDING		25.7	TONNES	$ 8.96 /TONNE	230.21	3.02	0.30
VET.+MED.,CHEM.+DISINFECT.					1964.94	25.81	2.54
MANURE DISPOSAL (IF HIRED)							
HIRED LABOUR		441.9	HOURS	$ 5.28 /HOUR	2334.29	30.66	3.01
HOG TRUCKING COSTS					7.29	0.10	0.01
MARKETING & ASSEMBLY CHARG.					106.86	1.40	0.14
TAXES,INSURANCE & UTILITIES					3549.40	46.62	4.58
MACH. BLDG. EQUIP. OPERATING & REP.					3128.92	41.90	4.04
ACCTNG, PROF. DUES & MISC.					668.29	8.78	0.86
INTEREST-OPR.LOAN:LVSTK,FEED ETC.(15.5%)					1372.82	18.03	1.77
PAID INTEREST-CAPITAL LOANS					11169.02	146.69	14.42
OTHER CASH COSTS					25291.32	332.14	32.65
TOTAL CASH COSTS					48619.62	638.52	62.77
NON-CASH COSTS:							
OPERATOR'S LABOUR		1617.6	HOURS	$ 6.85 /HOUR	11080.36	145.52	14.31
FAMILY LABOUR		429.0	HOURS	$ 3.43 /HOUR	1471.47	19.33	1.90
DEPRECIATION (BLDG.+EQUIP.)					7971.16	104.69	10.29
TOTAL NON-CASH COSTS					20522.99	269.54	26.50
B. TOTAL PRODUCTION COSTS					69142.61	908.06	89.27
C. RETURN TO EQUITY (A-B)					-32354.25	-424.92	-41.77

HEAD HANDLED	737.9	DEATHLOSS %	2.4	CWT.LIVE WGHT.	358.6		
WEAN.SOLD/SOW	7.4	AV.WEANER WT.	46.3	NO.WEAN EQU.	774.6	LBS.FEED/SOW	4125.2
LBS.FD/WEAN.EQ	405.5	HOME FEED %	46.3	HOG RECPT. %	82.1	SOWS	76.1
SOWS/BOAR	17.8	REPLACE GILTS	12.7	PGLTS WND/SOW	9.2	WNG AGE(DAYS)	33.7
GRS.MARGIN/WNR	-15.3	NET INCOME/WNR	-25.6	EQUITY INT. %	-66.5	INVEST.INT. %	-13.9